DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Marine Protected Areas FEDERAL Advisory Committee

MEETING

TUESDAY APRIL 24, 2007

The Advisory Committee met in Conference Room 555, Stafford Place II, National Science Foundation, 4121 Wilson Boulevard, Arlington, Virginia, at 8:30 a.m., Mark Hixon, presiding.

PRESENT

MARK HIXON Chair

BOB ZALES, II Vice Chair

TUNDI AGARDY Member CHARLES BEEKER Member BOB BENDICK Member DAVE BENTON Member DAN BROMLEY Member ANTHONY CHATWIN Member MICHAEL CRUICKSHANK Member Member ELLEN GOETHEL JOHN HALSEY Member DENNIS HEINEMANN Member STEVE MURRAY Member TERRY O'HALLORAN Member R. MAX PETERSON Member WALTER PEREYA Member GIL RADONSKI Member

ALSO PRESENT

JIM RAY

RANDAL BOWMAN Department of the Interior

Member

ROBIN BRAKE Department of the Navy

THE HONORABLE SAM FARR U.S. House of Representatives

MAGGIE HAYES Department of State

JONATHAN KELSEYNOAA

BOB MELZIAN Environmental Protection

Agency

JEFF PEARSON U.S. Coast Guard

JOSEPH URAVITCH NOAA

LAUREN WENZEL Designated Federal

Official

CHARLES WAHLE NOAA

A-G-E-N-D-A

Call to Order 3
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Ocean Conservation in the 21st Century The Honorable Sam Farr (California)
Ocean Science at NSF: Applications to MPAs and Ecosystem Approaches to Management Dr. Julie Morris, Director of the Division of Ocean Sciences
Break
FAC/Public Comments on Draft Framework and Next Steps Joseph Uravitch and Jonathan Kelsey, MPA Center
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1 P-R-O-C-E-E-D-I-N-G-S 2 8:38 a.m. CHAIRMAN HIXON: Good morning, everybody. Okay. 3 So what we're going to do today is a whole variety of 4 5 things. You've been getting a huge flurry of e-mail and may 6 Ιt look overwhelmingly bizarrely messages. 7 complicated but we are actually going to do some very focused 8 straight forward work at this meeting. What I want to 9 first do is approve the minutes of our previous two meetings. Those were e-mailed to everyone. Presumably everyone 10 11 has had a chance to review those. Roll call? I don't 12 think we need a roll call because I can see we have a quorum 13 just visually. Do you want to do a roll call? Okay. Let's 14 do a roll call. Thank you, Bob. 15 Ready? 16 MS. WENZEL: Sure. 17 CHAIRMAN HIXON: You want to do it? 18 MS. WENZEL: Sure. 19 Okay. Mark Hixon. 20 CHAIRMAN HIXON: Present. 21 MS. WENZEL: Bob Zales. 22 VICE CHAIR ZALES: Here. 23 MS. WENZEL: Tundi Agardy.

DR. AGARDY: Here.

MS. WENZEL: Charles Becker.

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1	MR. BECKER: Yep.
2	MS. WENZEL: Bob Bendick.
3	MR. BENDICK: Here.
4	MS. WENZEL: Dave Benton.
5	MR. BENTON: Here.
6	MS. WENZEL: Dan Bromley. Tony Chatwin.
7	DR. CHATWIN: Here.
8	MS. WENZEL: Mike Cruickshank.
9	DR. CRUICKSHANK: Here.
10	MS. WENZEL: Eric Gilman. Ellen Goethel.
11	MS. GOETHEL: Here.
12	MS. WENZEL: John Halsey.
13	DR. HALSEY: Here.
14	MS. WENZEL: Dennis Heinemann.
15	DR. HEINEMANN: Here.
16	MS. WENZEL: George Lapointe. Bonnie McCay.
17	Steve Murray.
18	DR. MURRAY: Here.
19	MS. WENZEL: John Ogden. Terry O'Halloran.
20	MR. O'HALLORAN: Here.
21	MS. WENZEL: Lelei Peau. Wally Pereya.
22	MR. PEREYA: Here.
23	MS. WENZEL: Max Peterson.
24	MR. PETERSON: Here.
2 =	

1	MS. WENZEL: Gil Radonski.
2	MR. RADONSKI: Here.
3	MS. WENZEL: Jim Ray.
4	DR. RAY: Here.
5	MS. WENZEL: Dan Suman. Kay Williams. Jim
6	Woods.
7	CHAIRMAN HIXON: Thank you, Lauren. Okay.
8	First order of business is approval of the minutes from
9	our last two meetings. Remember we had a teleconference
LO	meeting in February as well as our meeting last October
L1	in New Port, Oregon. Are there any corrections to the
L2	minutes? Did everyone have a chance to review the minutes?
L3	Are you reviewing the minutes now?
L4	DR. RAY: I will move to be approved. You want
L5	a motion?
L6	MR. BENTON: I'll move approval.
L7	DR. RAY: I'll second it.
L8	CHAIRMAN HIXON: Okay. We've had two moves to
L9	approve and two seconds. Discussion? Okay So with no
20	objections we will approve the minutes.
21	Okay. Thank you. I've been reminded that whenever we
22	speak we need to mention our name before speaking to make
23	sure that the recorder is able to record the minutes properly.
24	Dave.
25	MR. BENTON: Mr. Chairman, Dave Benton. In the

1 minutes just a point of clarification. We approved both sets. Right? 2 3 CHAIRMAN HIXON: That's true. 4 MR. **BENTON:** Okay. The set from the 5 teleconference, I trust that your letter and the motions 6 that are referred to in the minutes are part of that record. 7 Is that correct? CHAIRMAN HIXON: Yes, it is. 8 MR. BENTON: Fair enough. 9 10 CHAIRMAN HIXON: Thanks, Dave. 11 Okay. A brief review of the agenda. We'll go 12 into the details of this later but as you can see this morning we have several speakers who are going to address 13 some important issues regarding our business. The large 14 15 part of this meeting is going to be work in ad hoc 16 subcommittees. I will go over that in great detail after 17 the morning break. Otherwise we have, as usual, two public comment periods. 18 19 We will be recessing early tomorrow so that people 20 have the opportunity to visit whoever they think is important 21 to visit here in Washington and prepare for the reception which will be up on Capitol Hill Wednesday evening. 22 23 intend to finish our ad hoc subcommittee work completely

during this meeting and I'll explain why that is important

to do so and then revert to our original standing

24

subcommittees in preparation for our October 2007 meeting.

Details will be forthcoming on that.

Okay. Just a little bit before we get started. I think I can speak for Bob Zales and myself simultaneously. We very much appreciate the unanimous support that we received to step into these roles at our meeting last October in Newport. We are going to strive to do at least what Max told us to do which was to be firm, patient, and focused.

On top of that, I have the full intention of being neutral and fair in my capacity as chair. Otherwise, I would like to continue the style of proceedings that began under the able leadership of Dan Bromley. That is, we will seek to reach consensus in our agreements. We will be informal.

I truly would prefer to be referred to as Mark as opposed to Mr. Chairman. First name basis is good with me. For speaking instead of standing and yelling, "Mr. Chairman," it will just be a matter of raising your hand in which case we'll have a queue up here and you'll all have your chance to speak.

As much as possible we will reach agreement by consensus. When and if things become sticky, we will revert to Robert's Rule of Order. That leads us to the issue of a parliamentarian for this group. Dolly Gorse

1 ably served in that capacity while she was a member. She 2 is no longer with us so it raises the issue of having a 3 parliamentarian. 4 According to Robert's Rules this is a purely 5 advisory role. It is a person basically who brings the book to every meeting and if things become sticky knows 6 where to look in the book. The chair then reviews that 7 part of the book and calls a decision in the case of anything 8 9 sticky. 10 I have been made aware that George Lapointe 11 is willing to serve in this role if no one else steps up 12 so we do have one volunteer so far. Is there anyone else who very much wants to serve in the capacity of 13 14 parliamentarian for this group? 15 MR. O'HALLORAN: Terry O'Halloram. I vote for 16 George. 17 CHAIRMAN HIXON: Is there anyone else who wants to serve in this capacity as parliamentarian? George is 18 19 not going to be here this meeting so we will first deal 20 with George being sort of the preeminent one and we'll 21 have to have one for this meeting as well. 22 MR. PETERSON: I'll do it. 23 CHAIRMAN HIXON: For this meeting? MR. PETERSON: Um-hum. 24 25 CHAIRMAN HIXON: Okay. So what I'm hearing,

1 if there are no objections, Max will be parliamentarian 2 for this meeting, George Lapointe would subsequently be parliamentarian. Are there any objections? 3 4 have a parliamentarian. 5 Thank you, Max, for stepping up this meeting. 6 Do you have your book? 7 MR. PETERSON: I'll have to borrow yours. Ι didn't know I was going to do this. 8 CHAIRMAN HIXON: You have to bring the thick 9 10 one next time. Our first speaker today at 9:00 is going to 11 12 be Congressman Sam Farr who is not yet here so we have 10 minutes. We're already ahead of schedule. I like that, 13 staying on track. 14 15 Let me start introducing our work so you can 16 start turning your own individual gears about all this. 17 Essentially when we issued official comment on the draft framework for a National System of Marine Protected Areas 18 19 the MPA Center actually listened to us, which they have 20 in the past, which is a good thing, and they now are preparing 21 to revised that draft framework to create the final framework. 22 They have some very explicit specific questions 23 they would like us to answer for them at this meeting. 24 25 The final framework will be basically drafted and completed before our next official meeting so this is why we have decided working with the MPA Center the Executive Committee and I have worked out a set of ad hoc subcommittees.

Now, things have continued to change through time with those ad hoc subcommittees because people are not able to show up at the last minute. As it now stands each of us is assigned to an ad hoc subcommittee. These are given letters rather than numbers to avoid confusion with our regular standing subcommittees. We are going to have to merge the meetings of some of these ad hoc subcommittees.

The news right now is that Ad Hoc Subcommittee A and Ad Hoc Subcommittee C2 will be meeting together as will Ad Hoc Subcommittee C1 and C3. C1 and C3 are meeting together, A and C2 will be meeting together. I'm trying to avoid the great details until a little later right before we do our work.

The information regarding these subcommittees, the names, what subcommittee you are assigned to, and all the associated documents should be in your packet. Ex officio members are welcome to join any subcommittee they choose.

In the packet are both the specific charge for each ad hoc subcommittee, a list of useful information and, very importantly, a strawman table for the product

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for each ad hoc subcommittee. These strawman tables were developed by the MPA Center in the format that they would find useful for our input. We do not have to use those strawmen. We don't have to use that particular format. These are simply suggestions on where to get started. The idea here is that we are going to produce very focused lists of information in as short of time as we can while still being efficient and using our collective brain power. After each subcommittee completes its work, by Thursday we will vote on passing this information forward.

As in our previous proceedings all the gut work, the bait, the grinding away, is going to be at these ad hoc subcommittee meetings. This is where I want people to work things out, reach consensus, and present a unified voice to the plenary session upon completion of their work. If for some reason there is absolutely no way to reach consensus, then I guess we'll have to have whatever, a majority/minority report. But we do have to complete this work this meeting. This work will not carry over beyond this meeting.

My desire would be for our ad hoc subcommittee work to be completed earlier than later so that we can concert to our standing subcommittee work which also must be completed by the end of our October meeting this fall because in October 15 members of this group will be rotating

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off so it's going to be a whole new FAC thereafter. We've got a lot of focus work here in front of us.

Brian. I'm sorry, Tony.

DR. CHATWIN: Thank you, Mark. Just a question for clarification. When you say the ad hoc subcommittees have now been -- will meet together, does that mean they are not merged and they will address both the issues as one subcommittee?

CHAIRMAN HIXON: Thanks, Tony. I was going to
-- I was trying to put off going into the detail right
before we break up but, yes, absolutely. What's going
to happen is we are merging these subcommittees so that
each of the merged subcommittees is basically doing two
sets of business, each of the original subcommittee's work.

Each ad hoc subcommittee will be chaired by a member of
the ex com who are originally involved in setting up these
things so there will be a trading of the ex com, ex com
chairmanships, if you will, according to the business at
hand.

When Subcommittee A and C2 get together, they can choose which work to do first. One member of the ex com will chair the C2 business. The other member will chair the A business. Your original subcommittee are still intact. You are just going to have more brain power involved with your subcommittee. Thanks.

DR. CHATWIN: Thank you.

CHAIRMAN HIXON: Brian Melzian had an announcement he wanted to make and this would be an appropriate time, Brian. Thanks.

MR. MELZIAN: Thank you, Mark. As some of you may know, remember I've been involved representing EPA on the Interagency Working Group on Ocean Observations as we strive to work in a collaborative manner with up to 16 federal agencies as of today and state agencies and NGOs and others in development of integrated ocean observing system as recommended strongly in the President's Ocean Action Plan.

Another major effort that is underway, and I wanted to give you an update about, is the development of the National Water Quality Monitoring Network which I believe is going to be germane to this national system in Marine Protected Areas which at last count could be 1,500 to 2,000 areas perhaps in its final form.

Week before last I had an opportunity to help with the U.S. Geological Survey, NOAA, and Department of Interior to put on a major exhibit at an EPA symposium in Washington, D.C. I'll be distributing over near where the coffee is for your use, if you care to obtain it, is a poster version or small version of the exhibits that was on display in Washington, D.C. last week. It's a GIS

map. It lists the various structure or the design including estuaries near shore, off shore, EEZ, great lakes, coastal beaches, wetlands, rivers, at-risk and ground water.

This was another major recommendation made in the U.S. Ocean Action Plan and is one of the few highlights in that action plan that actually requested the agencies to get together and submit a document to the President's Council on Environmental Quality which was done in April of 2006.

In addition to this summary of the status of this network, I'll have on display the executive summary of the report, a press release that came out last week from U.S. Geological Survey about the pilot studies now underway, which is the Delaware River Basin, Great Lakes, John, and San Francisco Bay -- these are pilots that are underway -- a two-pager describing their interaction with the IOOS in development of this network, and the abstract from the exhibit last week.

What I'm trying to do, as you can imagine, with these various committees is try to inform people about what actually is happening, or is not happening, but also how I think our deliberations, especially the monitoring component of this national framework system could, and perhaps should, interplay with not only this network but the IOOS. I'll have these right over near the coffee table

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1	for you to pick up if you care to do so.
2	Questions? Comments? Thank you.
3	CHAIRMAN HIXON: Thank you, Brian. One thing
4	I did want to do is welcome a new ex officio members of
5	this committee. Robin Drake is representing the Navy.
6	Robin, you want to introduce yourself at all?
7	MS. DRAKE: How much do you want.
8	CHAIRMAN HIXON: Whatever you want to give.
9	We seem to have time.
10	MS. DRAKE: Okay. Actually I am a reservist
11	recalled to active duty to do
12	CHAIRMAN HIXON: Could you use the mic, please?
13	MS. DRAKE: Okay. Can you hear me now? I am
14	actually a reservist who has been recalled to active duty
15	to monitor science and technology for the Navy Secretariat
16	and this is one of my assignments to start tuning in.
17	I work for Mr. Don Schregardus who is the actual appointee
18	to this. That should do it. Right? I'm a biologist by
19	training.
20	CHAIRMAN HIXON: Oh, that's good to know. Thank
21	you.
22	Representative Farr will be here shortly. Are
23	there any questions or comments at this point to fill the
24	time? Let's talk about dinner this evening, shall we?
25	MS. WENZEL: Okay. On the advice of some

semi-locals, you know, Maryland and Virginia are worlds apart so I had to get advice about local places. We're going to go to the Rock Bottom Brewery which is apparently a good place to get a beer after a hard say at 6:15. It's in the Ballston -- I hate to say this. It's at the Ballston Mall across the street. I'm going to send around a sign-up sheet so I can just get a headcount. I hope all members and spouses and friends will join us. Thanks.

MR. PETERSON: Do we get food?

MS. WENZEL: Yes. You don't just have to drink.

CHAIRMAN HIXON: You can have food if you want,

Max.

Tony.

DR. CHATWIN: Thank you, Mark. Just a question. Are we going to be producing these products in subcommittees at this meeting and then we'll revert back to the standing subcommittees and produce additional products. I just wondered if you could share with us your vision for how those products are going to be submitted. Are we going to wait to compile them all into one final product or at the end of this are you going to request the committee give you authority to go and send it onto NOAA and Interior?

CHAIRMAN HIXON: Okay. The products from this meeting we must submit immediately. They've got to go because that's going in to producing the final framework.

There's going to be two separate sets of products.

Welcome, Dan.

Welcome, Congressman Farr. It's a great pleasure to welcome the Honorable Sam Farr to our meeting today. Congressman Farr serves as the Congressman from California's Central Coast which includes Monterrey Bay and all the wonderful area around there. He's been in Congress for 14 years, serves on three subcommittees of the House Appropriation Committee.

Importantly, Congressman Farr has been a very strong advocate for marine conservation throughout his time in Congress. He was very supportive of the establishment of the MPA Center and this federal Advisory Committee and was instrumental in garnering funding for the MPA Center Science Institute to be located in Monterrey Bay which is a perfect location given the huge number of facilities and marine scientists that word in that particular region.

He's co-founder and co-chair of the House Ocean Caucus which is a bipartisan caucus that educates Congress regarding important ocean issues and introduces and passes legislation for better understanding using and managing our ocean resources.

Very importantly, he has introduced H.R. 21 also known as Ocean's 21 the first day of the 110th Congress.

This is the Ocean Conservation Education and National Strategy for the 21st Century Act which is based on recommendations from the U.S. Commission on Ocean Policy and Pew Oceans Commission. Congressman Farr is here today to speak to us about that legislation and other issues.

Congressman.

CONGRESSMAN FARR: Thank you. I just want to thank you for all your years -- all of you in this room for your years of service. I started getting interested in the oceans when I was in the California legislature. We had an Association of State Legislators from the western United States and we all got together and realized that we had coastal waters from Oregon, Washington, and California.

We were all thinking about what did the coast mean to us from an economic and political standpoint. What we learned was all these sort of conflicts of governance that were going on between state governments, local governments, even inter and intra-state governments. On top of that was the federal system which didn't talk to each other either. The issues between what the Coast Guard and the Navy were doing were different than what National Marine Fisheries and all the different acts in it.

It occurred to us then as state legislators that we ought to form a compact of the west coast. We

did a report called The Blue Revolution which was put out in the late '80s, early '90s. I authored a bill in the California legislature called the California Oceans Resource Management Act, know as CORMA, which was a study of what were the assets in California, what did the coastline mean and what was on the coastline and what went on in the water.

It was one of the thickest report because it really put in inventory of what we had in not only through the geography and geology and biology, but it also had all the research institutions that are along the coast. That was done under Governor Pete Wilson. It was interesting right after that I got elected to Congress and I said now that we know all these things let's do something about it.

That was started in 1993 and this Thursday for the first time since I've been in Congress for 14 years we're going to have a hearing on Ocean's 21 which is the result of the work done by the Pew Charitable Trust and the Oceans Commission which was the bill that I worked on with Senator Hollings that got signed and created a federal commission to look at ocean policy. Taking the recommendations of those two commissions we have formed over the years and revised the bill that is now called H.R. 21.

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I'm very excited to be here with you because I accompanied President Clinton on May 26th in the year 2000 out to the Maryland shore where he enacted the executive order which created the Marine Protected Areas. I think there is a lot of misunderstanding at the time whether these were going to be the first time we were going to established Marine Protected Areas and get criteria or whether we were trying to just pull what had been done together.

As I found out, there were a lot of areas, so-called Marine Protected Areas, that had been designated over time but without any kind of national policy. The creation of your group, the senator and the Advisory Committee has been really essential to try to pull a national standard together because what you found is how much conflict there is in governance and how different definitions mean different things to different people.

We have interestingly just gone through a state and here is where I think we are going to run into some problems. California under its own state initiative has been creating Marine Protected Areas done by a commission and will make recommendations to the California Fish and Game Commission.

They have just implemented their second set of recommendations for Northern California and you would

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think from the recreational fishermen and the commercial fisherman that we have just put the entire coast off limits to fishing. The yew and cry is just not proportional to what was done.

My defense of it is just to say get out a map to anybody. Just look at this map. How much of this total ocean out there they can fish in, a near-shore ocean.

Now much has been ut into protected zones. They are not all no fish no take. It's similar to what you want to do.

I'm thinking that as we try to come up now with a federal recommendation on top of what California has done, we are going to have a hard time -- there is a real need to do kind of an education as to how these differ or how they are mutually beneficial to one another and how the governance structure is going to work. I think some states, and I only know California, is ahead of many other places.

I tell everybody we have a new Congress, new speaker, and a new direction. I think many of you, or all of you, who are interested in the sciences that is going in your direction. The difficulty is that the Democrats have adopted a very smart but conservative spending plan called PAGO which means if it cost anymore you've got to figure out how to pay for it. Rob Peter

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to pay Paul or drive a revenue source.

The President isn't going to sign many bills with any new revenue sources. Maybe some fee bills but I don't see any tax bills being signed that are going to increase taxes. That means we are going to have to be working on a very tight base to begin with. Within that base we are going to have to rob Peter to pay Paul.

One of my complaints in the NOAA budget is last year I did the Rumplestilskin speech on the floor of the House where you just get really angry and bang your fist and jump around like I remember as a kid reading that Rumplestilskin did. I just accuse NOAA of taking -- they might as well just take the O out of NOAA because they essentially have not done what they should be for the oceans.

The budget is not at all balanced. The atmosphere gets a lot more attention than the ocean. Yet, we know that the weather that NOAA is responsible for is generated by ocean activity and ocean climates. We are going to try to work next week, the subcommittee, just as Commerce meets. They will hear -- tomorrow, excuse me, they meet. We'll hear the members of Congress ask for specific earmarks in that bill. I'm going in for a big push on NOAA's wet side.

I think what you are going to see, and it would be interesting to hear from you, what are going to be the

cost implications of your recommendations. Is it just a matter of getting existing entities to work better together in collaboration or are we really requiring new work for the Government? If so, how are we going to pay for it.

Nothing wrong with paying for it. If it's good and has to be done, we can make that argument. I'm looking forward to sort of the politics of how your recommendations are going to be implemented. I stand ready to do that.

The politics on the hill are very interesting.

We created back, I guess, right after President Clinton

did -- we had the Year of the Oceans and Barbara Boxer

and I convinced him to do a White House conference on the

ocean. I was shocked when they decided to have it in my

district. Of course, both Barbara Boxer and myself were

up for reelection and I don't think that had anything to

do with it.

We thought it was a logical place but we had never heard of a White House conference not being done in Washington. I have since learned there are several White House conferences that have been done at other places. This was the first ever White House conference on the ocean. We had a really good turn out.

I mean, at first all we were going to get is perhaps the Under Secretary of the Navy and then the Secretary

of the Navy and then the head of NOAA. James Baker was going to come and that was about the top we could get for this conference.

At the last minute it must have been a slow weekend in Washington because President Clinton showed up, Mrs. Clinton with him, Al Gore was there, and three of the Department heads. Not only the head of the Department of Commerce but other departments as well. It was practically the entire White House in Monterrey learning for a short 24 hours what was going on in oceans.

That was a great day for us because it shows that there was interest in it. As I said, President Clinton then in the year 2000 signed the order creating Marine Protected Areas. We came back to Congress and decided we ought not to allow the energy to drop and created an Oceans Caucus. The idea behind the caucus is to keep it totally bipartisan so for every Democratic member we try to get a Republican member.

Not many hold that way because there's much higher interest. I think more Democrats represent coastal zones than Republicans. The caucus has become predominately Democratic but the bill that we drafted, which was the product of the Pew Charitable Trust and the Oceans Commission was first introduced because I worked a lot of it. In fact, Lisa who is here -- where is Lisa?

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A former NOAA Fellow way in the back corner.

You don't have to sit that far back, Lisa, anymore. You're not working for me.

She worked on this early on until, in fact, I think that day when the Act was signed she was the one that drove me to the Marine One to fly out with the President.

We've had this NOAA Fellows in our office putting together and holding this Oceans Caucus and we drafted this bill on these recommendations. The first time I thought it was not going to pass with a Democratic author, certainly Mr. Pombo, Chair of the Resources Committee.

We got Jim Greenwood who is really a good active Republican. He has since resigned from Congress to go work for the pharmaceutical industry. Then Curt Weldon, who is always a very big thinker and wanted to get this bill passed, introduced it last year. It never got a hearing. He was defeated. I took over the bill this year and have gotten quite a few co-sponsors. As I said, it's going to be heard this Thursday.

I would encourage you all to whatever spin you can give on it that it is -- I don't think there has been a legislation before Congress in the years that I've been there that had more transparency, more work by these hearings that the Commissions, both Pew and the Oceans Commission, had all over the United States with input of every background.

In fact, the President's commission had a lot of oil and gas folks on there which I thought were not going to come up very strong recommendations. In fact, they have and they are backing them. Admiral Watkins was the chair of that. So there has been a lot of work and even the drafting of this bill has gone over many years.

It essentially does on the large scale what

your recommendations. It essentially pulls together all

a lot of things I think you are probably recommending in

the interjurisdictional players in the ocean and requires

that they all follow the policies that have been laid out

in this act.

Essentially you get kind of analysis of the impact. Whatever ocean activity is going to go on it's going to have to be measured up against what the impact is in the ocean. I hate to say, or wouldn't say, it's going to require an environment impact report but I think things like that are certainly going to lead to a lot more analysis as to the detrimental impacts of all activities in the ocean and some ability to mitigate those. We are required to mitigate them.

I'm very excited that probably the most fragile and sensitive areas of the ocean are ones that you've dealt

with dealing with the Marine Protected Areas. As was stated by Mark, I grew up and represent the Monterrey Bay area. My father for a short time was in the california legislator and his legislation back in 1959 created the first underwater state park in California off Point Lobos.

I didn't even know he had done that. He passed away 10 years ago. I think in our family we have always been very interested in creating protection of land and the ocean and sound management based around good science. I think this hearing on Thursday is sort of a culmination of my youth and my life in politics to try to bring a really strong policy and have a national policy for oceans to strengthen NOAA and to establish a national and regional oceans governance structure.

I thank you for doing the micro, in essence the provisions that will create the national parks in the ocean or the national forest in the ocean. I happen to represent the largest marine sanctuary until last year. We are very proud of that sanctuary. It has become greater than anything we ever envisioned just because of the feeling of the public who feels that they have ownership and being proud that the ocean out there has this special designation and working constantly to interpret it.

We never knew -- you'll love this story. I knew that the National Marine Sanctuary had really -- you know,

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people come to Santa Cruz and they want to know where do you get tickets to see it. They want to go in it like a park. They think you just arrive at the ocean's edge and then there's something that takes you into this National Marine Sanctuary.

That appeal of coming to the ocean because it does have this designation is just amazing. People want to come and see a National Marine Sanctuary. What's exciting is now they find, as everybody that lives around the ocean knows, it's two dimensional. You see a flat plain.

The aquariums that have developed the interest in whale watching, as my private fishing folks tell me, they are making a heck of a lot more money off the watchable wildlife than they ever were on the catchable wildlife. They are very pleased with it. It's a cleaner industry. Good turnaround. They make more money. It's also big in the off-season which is the wintertime when the whales are migrating. Margaret Owings is a close friend of mine and she created a law in California that protected the sea otter. I always said that was the best economic development bill we ever had because we have more people creating images of sea otters not only in photos and in film but earrings and pendants and coffee mugs and all kinds of things that everybody takes home with them.

There's this whole new opportunity when we create

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these areas to strengthen, I think, an economic asset which will help then develop more and more science which will develop better management policy and it will just be continuing on.

Another story I want to tell you is I knew we had really made it in creating the National Marine Sanctuary when I saw an ad in the <u>Santa Cruz Sentinel</u> by a used car salesman saying that if you visited his used car lot -- his advertisement was mostly for San Jose which on the other side of the mountains. San Jose goes to the ocean directly -- that if you bought a car from him, you could also visit the National Marine Sanctuary. I knew that when used car salesmen are using the catch of the National Marine Sanctuary that we had really upgraded ourselves.

Again, I'll stop and answer any questions you might have but I think is hopefully going to be really a great week to get us focused back on. We've got the racks up on that and a lot of other stuff going on in Congress. The fact that we're having our first even hearing on a bill that's been worked on for the last seven or eight years is a really good feeling. In the meantime you've had a lot to do with bringing the attention to why this type of legislation needs to be passed. Thank you for your service.

CHAIRMAN HIXON: Thank you very much,

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1 Congressman. 2 Before I forget, I would extend an invitation 3 to you for a reception we're having on the Hill Wednesday evening at 6:00 in the Russel Senate Office Building, Room 4 5 253. 6 CONGRESSMAN FARR: All the way over there on the Senate side? 7 CHAIRMAN HIXON: All the way over there on that 8 side. 9 CONGRESSMAN FARR: It's easier to get to this 10 11 building. 12 CHAIRMAN HIXON: This federal Advisory Committee is comprised of 30 very broad stakeholders from 13 a variety of ocean industries, the fishing community, the 14 environmental community, as well as scientists. We've 15 16 been working for three or four years now and are continuing 17 to do so. I'm sure there may be questions for the Congressman. 18 Anyone? Jim Ray. 19 CONGRESSMAN FARR: I would like to have some 20 -- you tell me what you think your council's recommendations 21 are. I haven't read the report. 22 DR. RAY: My name is Jim Ray. You made a very 23 interesting point early in your talk about the necessity 24 of having adequate funding. What is your feeling about, 25 at least on the Federal Government side, of designating

new Marine Protected Areas of various flavors if there is not adequate funding earmarked to be sure that they can carry out their mandates? What is your feeling about that?

CONGRESSMAN FARR: Well, I think that's always tough. First of all, you are going dispute with the administration on what the costs are going to be. They are going to low-ball it or, if they don't like it at all, high-ball it and then recommend against it. I'm not sure you need a lot of new governance. You need to make existing agencies work more collaboratively and more effectively. I think we can get a lot of bang out of existing governance.

The problem that I've seen with the National Marine Sanctuary is that we created some laws in that sanctuary that are forcible laws but we don't have any law enforcement. What we did because on land what you do with fire departments is they all create these mutual aid agreements and police departments are beginning to do the same thing as they get more sophisticated certainly under homeland security and what they call interoperability.

We need to bring that concept of interoperability to the ocean so that sort of the folks that are on the ocean have the ability to also police it. Not necessarily to write tickets but to report things that are wrong.

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I think we did that in the National Marine Sanctuary by not getting any designated -- I think we now have a law enforcement officer, a federal officer, but by in large through a Navy -- excuse me, a Coast Guard lieutenant was stationed in Monterrey just likes to do these things.

He wrote the whole code book. Then he went out and went to different law enforcement agencies, sheriffs and police forces around, highway patrol, state fish and game folks, and just brought them all in and said, "Look, you're the eyes and ears and the first responders. Why don't we sign these mutual aid agreements that we are going to help one another enforce these provisions in the ocean?"

We got a lot done for no cost. I think those kind -- it takes leadership to do it because it's a lot of micro-organizing but it can be done. I think you have to do that in everything we're doing today. It's going to be -- I mean, there's two things going for you. The idea that Marine Protected Areas is just a good and smart thing to have.

I think that sounds well and resonates well with the concern you have obviously from people who traditionally have had commercial interest in the ocean and feel that this may be more regulation or prohibition. They are going to develop some concerns. I think things

can be worked out.

2 CHA

CHAIRMAN HIXON: Dennis Heinemann.

DR. HEINEMANN: I'm Dennis Heinemann. Thank you very much for coming to visit us. As I'm sure you are very well aware, there's been a lot of debate and controversy about the benefits and values MPAs. I would be, and I think the committee, would be very interested in hearing your views based on your history with the politics of the oceans and the governance of the oceans and MPAs and your love of the oceans what you feel are the most important values and benefits that society gets from MPAs.

CONGRESSMAN FARR: If you -- I'll just take my own district which I kind of know better than anything else, which has evolved in the last 10 years. We live on the ocean. Our communities have always been on the ocean. The only jobs in the ocean have been commercial fishermen. Those jobs have been dwindling and now there's a big tourist trade. A lot of the commercial fishermen who have boats, particularly the party boats, are turning them into watchable wildlife excursions.

But you've also had something else happen and that is that the interest in marine science has really grown in every one of our -- the University of California.

Santa Cruz has Long's Marine Lab. The University of California state university system has Moss Landing Marine

Lab. Stanford, a private university, has Hopkins Marine Lab. The Packard family invested their own money not only in building an aquarium but building a deep ocean research center in Moss Landing.

We've had private sector researchers come to the area and open up private firms. Because of the demand for people on these research vessels you don't have to be Ph.Ds in science but to drive the remote control vehicles, we now have a community college certificating that profession. And working with handlers on the boat to get them trained.

Just last week I was talking to some folks in the District about is there opportunity for employment in the marine sciences. They said there is tons of opportunity. This is a growth industry. I think it's happening whether -- I mean, probably there is not enough economic analysis done.

If you talk to the merchants and the fact that they know the tourism has benefitted from it. Now as you get access, access and interpretation, which I think is why I like it. I think if you don't protect these areas and you can't protect them without supporting knowledge which is sort of interpretation. You interpret this stuff like my father used to do taking me to the tide pool which got me all excited.

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The other thing I've watched is the technology and I think it was Sylvia Earl got me to visit MBARI Center in Moss Landing where this little research car, the Newster, was being -- you know, you spend a day learning how to drive this thing. It looks like a little -- it's about the size of a Volkswagen. You don't need any special equipment. You can go in your street clothes. You can drive this thing and I remember it said it could go to depth of 4,000 feet.

It takes care of all the science and atmosphere is taken care of and pressures and everything. It hit me if they've got these things out there now, and the idea was to build them so more and more people get access, it won't be long before Hertz and Avis has those. You're going to rent these things. I represent the 17-mile drive which is the drive around the peninsula at Pebble Beach.

I just said, you know, we're going to have an alternative. You can either do that on land or under the water. I think the under water will have more demand than the -- you've got to pay 8 bucks, 16 bucks or something togoseetheotherone. That's where I think this innovation takes us. I think we will be in the sea as soon as we can get in there. There will be all kinds of interest.

Have you been hearing just comments about how many people have been watching this series on television on the Planet Earth and how many of my colleagues in Congress saw that series last week on the leatherback turtle that migrated from the coast of Mexico all the way to Samoa or some place and the way that was all put together? I have never heard so many people. I think we are so bored of watching politics today we are all watching nature channels to get a reality check.

Those things are just growing and I don't think
-- I think those who criticize it fail to understand what
it really takes to do sustainable economic development.
Sustainability is a word we throw around very loosely
but sustainable means protection and management.

I think of what sustainable means in agriculture which is best management practices. It seems to me all this adds up to best management practices whether you have the Navy shooting or doing sonar or whether you are a fisher man trying to make a living off the ocean. We can all do it a little smarter.

CHAIRMAN HIXON: We've got Bob Bendick, Dan Bromley and Bob Zales.

MR. BENDICK: I'm Bob Bendick. You commented on how more people seem to be interested in the health of the earth. How would you handicap your bill and its

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chances of passage and what do you think the biggest failure is to getting it passed and getting a national ocean governance system in place today?

CONGRESSMAN FARR: The biggest barriers are ignorance and the administration. I don't think they are

ignorance and the administration. I don't think they are keen on thinking this is necessary. They haven't opposed the bill but they haven't done anything to come and suggest they are going to testify in favor of it.

So far there is only one commercial fishery interest in Alaska that has indicated they have concerns with it and they have not really -- from what they have been doing in working out some policies in Alaska, I don't know how they can oppose it because they are already on record supporting a lot of those things.

This bill doesn't go into specifics. It leads up to entities like you are on right now like the advisory to make subrecommendations. But this does do a lot for coordination and for setting up national standards for impact. I think that is really essential.

CHAIRMAN HIXON: Dr. Bromley.

DR. BROMLEY: Thank you for coming. I'm an economist and some of the members of my tribe believe that people like you are interested in the monetary value of nature. Many of my colleagues spend their lives trying to put dollar values on nature. I guess I would like to

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ask you as someone who sits and has to make choices and decisions do you find that approach compelling or do you mobilize your reasons on other grounds? Do you understand my question?

It's sort of a utilitarian monetization of the world versus other kinds of arguments for protection and what have you. I would like to hear from somebody who has to raise his hand every now and then. Is what my tribal members are doing a useful exercise for you or do you regard it as something else?

CONGRESSMAN FARR: I think what's missing in the environmental community is the discussion of economics.

I was always -- I'm a Peace Corps volunteer and I was always the idealist. It didn't matter what cost. It just didn't matter. You just did what was good. From my love of nature being brought up in Carmel it was just the natural thing to do.

As I got older I started to realize I became a county supervisor and then I had to fight all those battles. Essentially it's the value of private ownership versus this sort of environmental cause. Now in the board of supervisor's meeting the developers would come in with sketches and lawyers and planners and had gone out and talked to all the labor unions who were in the building trades and they would come in and give this great

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presentation about how beautiful this project is going to look and how much revenue it's going to generate and taxes and how many people it's going to employ to build it and how happy people are going to be for the rest of their lives to have all this housing sprawl development.

Somebody from the Sierra club would get up and say, "I don't like it," not based on anything. Just, "We don't like it." It just hit me if I'm going to communicate the value of environmental protection, environmental management, then I've got to put some figures on it.

DR. BROMLEY: Put a dollar value on it.

CONGRESSMAN FARR: Yeah. Then you're talking business sense because that is what is driving everybody. That is why I talk about Margaret Owings. I mean, my first campaign chairman was Ansel Adams and I learned that Ansel Adams certainly got a good value for his interpretation of the environment and with that was able to do a lot of wonderful things.

If he didn't have the income to be -- I mean, he was a very skilled technician and incredible photographer. He also had the wherewithal to get the message out. I think we need to get the message out. I think the problem so often with economists is it is too hard to understand the way they deliver the message. It's got to be linked

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1 to things like -- I mean, pictures of sea otters. I mean, 2 those kinds of things. People get that. DR. BROMLEY: I'm sorry. You're right but that 3 4 is a different thing. What I was really addressing is 5 what people would be willing to pay to preserve the ocean. 6 You see, that's a dominant activity. 7 CONGRESSMAN FARR: Those are really important. We need to have that legislation. You do it here but 8 not so much. In California every idea you have you have 9 10 to go out and get an economic impact. Unfortunately many 11 of these people don't ever give it future value. It's, 12 well, what is it going to cost us today. We've go to answer more phones and print more paper and, therefore, it's going 13 to cost you something. What's the value of watching a 14 15 sunset? 16 DR. BROMLEY: If I told you, would you believe that number? That's my question. If I said I had done 17 a survey and people told me the value of watching the sunset 18 19 was \$8,000 or \$8 million, the question that I have is would 20 you believe me? 21 CONGRESSMAN FARR: Yeah, I think, if you could 22 back it up. DR. BROMLEY: With what? 23 CONGRESSMAN FARR: What it takes to watch a sunset. 24 25 We've got to be there. If you don't live there --

1 DR. BROMLEY: Spend money to get there. CONGRESSMAN FARR: Get there. You have to watch 2 3 it in different ways. You take pictures of it. 4 DR. BROMLEY: I can give you good numbers on 5 that. 6 CONGRESSMAN FARR: That all adds up. 7 didn't have the sunset, maybe we wouldn't buy all those things to do that. 8 DR. BROMLEY: Okay. Thank you. 9 10 CHAIRMAN HIXON: I've been told, Congressman, 11 take one more question so Bob Zales is next in line. 12 VICE CHAIR ZALES: My name is Bob Zales, II. I'm currently President of the National Charter Boat 13 14 Association. I'm from Panama City, Florida. Kind of along 15 the lines of what Dan was talking about in economics, there's 16 two things. Mine is kind of a two-part thing because also 17 what you're talking about about the ecosystem and operations now for whale watching and stuff like this. 18 19 When you talk about EISs, and not necessarily 20 with information that has come out of Congress but with 21 our experience with the National Marine Fishery Service, 22 many times this information seems to be that somebody has 23 been very good at wordsmithing and put together some information in an economic impact study that is not 24

necessarily accurate but it's the only information that's

there and you have to deal with the best information available.

We've got serious concerns about that. Like Dan said, we can show in many cases economic impact much more severe because of close regulations and what is actually there and what you all as congressmen see. How do you deal with that? That's the first thing.

The second one is when you're talking about the ecosystem tours how do you weigh the cost benefit because what we've seen in the Gulf, the manatees and also with dolphins, is that when you get out here and you do these dolphin watches and with discards that we have to do with fishing, you create a nightmare because what you do is kind of like putting food at your doorstep and a raccoon coming there every night.

As long as you provide food they are going to come. These animals get used to being around boats. The public gets in and swims with them. They cause problems there. How do you deal with that?

CONGRESSMAN FARR: I think your questions are the key to the whole thing. That is why I'm -- I mean, you need leadership in the commercial industry to understand also the value of sustainability. Monterrey used to be the largest sardine port in the world. You can read Steinbeck's Cannery Row talking about where it all got processed.

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In the mid-'50s the sardines totally disappeared and we had a huge -- we didn't have any bailout money for industry just crashing. We had an economic disaster in Monterrey for many, many years. Many years. There was nothing for the fishermen to do. Actually, what I think brought it back was changing the name from squid to calamari.

People wouldn't eat squid but they love calamari.

That kind of helped get us back which we had no seasons on. To this day you can just catch squid and squid became more valuable -- one of the most valuable fisheries on the coast. They are just getting pounded because you can fish them as much as you want any day or night of the year.

I think that is the problem. If you just sort of do same old same old how do you end up sustaining it so that you will have a fishery to return to? That is the balance that we need more science on. Sometimes you have to air on the side of caution.

Now, when you do that I think there ought to be economic bailout for the fishermen. We're using figures we just passed. In the supplemental there is a big bailout for the salmon fishermen in Oregon and California because of the resident economics. It was not a natural disaster. It was a combination of taking water from the Klamath and giving it to water intensive farming on federal lands

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in Oregon and then not having enough stream flow so that the water temperature changed. A parasite got in there and infected the fish run.

Then we had low rainfall and the river went deadfor about a year. It just wiped out or severely affected the salmon spawning. We had to declare -- NOAA had to declare a disaster. We have just put \$70 million in the supplemental to help these salmon fishermen.

The same economics that tried to guess what the disaster was and how they are going to pay the salmon fishermen, they are going to have to come up with -- you don't just give money out so they are going to have to come up with very specific records and values to show how much money they lost that year which they would have otherwise made.

It goes both ways. I think those figures are lose sometimes for shutting down. You shut down on the side of error. But when there's damage the figures are loose, too, so we just try to perfect that and that is why you need these better measurement tools that the tribe of economists are going to provide for us.

You don't want to lose that fishery. You know the value of nurseries and you know what's happening to them. Why not keep some of these areas and see what happens? You heard some stories, and I don't know whether they

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are just anecdotal, that these closed areas replenish and you can fish on the edges and do very well and perhaps they will reopen some of these areas.

Ithinkwearegoingtoneedmuchmore -- California with all its fisheries are now becoming almost all limited entry. You just can't put every boat out there with all the equipment they have and just pound the fish. We've got to manage the stock. We do that on land. I have a cattleman who because we have no rain he just said, "I had to get rid of my entire cattle herd this year."

I said, "How are you going to make money?" He said, "I'm going to do recreational tourism. Get people on horses riding around my ranch and hunting wild boar and stuff like that." He said, "My cattle, I can't keep them on the range. I would have to bring in hay. It's not cost effective. They would also eat the limited grass and they would destroy that pasture."

He said, "I've been working for years and years to get that pasture to be really sustainable by nature and nature is taking away my option this year so I'm not growing cattle this year. I think maybe those are the kinds of things we have to start approaching when we are looking at wildlife and natural habitats for sustainable livestock for fisheries.

VICE CHAIR ZALES: A quick follow-up. That's

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kind of my point. Rather than rush into developing a new type activity which would be the whale watching in the Gulf and so on and so forth because you don't know what -- a lot of times unintended impacts cause unintended consequences.

The deal is by rushing in to do this not knowing what the consequences will be because, like I said, I know that in the Gulf of Mexico we created a nightmare with predator prey. Then dolphins and manatees and things like this are being killed unintentionally because they are getting used to the activity of seeing people so research needs to be done.

CONGRESSMAN FARR: Why do they benefit? Do you feed them?

VICE CHAIR ZALES: While you're feeding them because you have to discard fish. In areas along the beach you are not feeding them but because the dolphins see a lot of boat activity. Everybody is watching. They are all on boats and they are watching the dolphins. The dolphins get used to the fact that these boats are there. They are not being hurt but then when they are out and around they are not paying attention to the boat being in the water and a lot of times they get hit and things like this. It's these kind of things.

As an example last week, there was a 1,000 pound

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Make caught on the beach. The Make had a dolphin in his mouth. He was eating it. Those dolphins probably would not have been there had people not been watching them because these animals get used to being seen and they like to play and interact with the public. It's those kind of things that go on with this that somebody needs to see. Years from now it may be this new industry created more problems than it should have.

CONGRESSMAN FARR: I wouldn't be afraid of it.

I would manage it. That's what you've got to do. You've got to learn from practices of how to better manage. We had an operator who decided because there are so many Great White Sharks in the depths of Monterrey Bay that he was going to do a White Shark experience where you could go down in these cages.

He was just chumming the entire sea with all these dead carcasses, bloody carcasses. Guess who finally -- he didn't get a permit to do it. What finally put him out of business were the surfers who didn't like getting eaten by White Sharks. Again, you know, you kind of -- these things have an action and a reaction. But to say that you shouldn't get in it and deal with it seems to me is just the wrong approach. If there is a problem out there, study it.

CHAIRMAN HIXON: Thank you so much, Congressman.

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1 CONGRESSMAN FARR: I look forward to your help 2 with H.R. 21. It won't hurt the commercial fishermen. I represent a lot of them. Thank you very much. 3 4 DR. HIXON: Lauren, can se get a copy of that 5 bill? 6 MS. WENZEL: Yes. 7 CHAIRMAN HIXON: Julie, are you ready? Charlie. 8 9 MR. BECKER: I just want to comment that with 10 his father's creation of Point Lobos, does everybody understand that was the first Marine Protected Area in 11 12 California State Park established October 1960 which then was followed by John Pennicamp State Park in December of 13 14 1960. I'm glad to see that he's still a strong advocate of his father's work. 15 16 CHAIRMAN HIXON: Okay. Since we are meeting 17 at the NSF headquarters, National Science Foundation, it seems appropriate to hear from NSF regarding research funded 18 19 by the National Science Foundation that is relevant to the natural and social science Marine Protected Areas. 20 21 As Julie loads up her talk, Dr. Julie Morris is the Director of the Division of Ocean Sciences at NSF. 22 23 She is actually the person who funds my research through biologic oceanography. I had the pleasure of 24 25 serving with Julie on another federal Advisory Committee.

This is the NSF geosciences directorate committee on which
I serve and Julie is an ex officio member. Please welcome
Julie and she'll tell us about relevant science at NSF.

DR. MORRIS: Thanks, Mark. It's good to be here. Because you were perhaps unwise enough to give me half an hour, I decided to generously share the time. What we're going to do is I'll take probably 10 or 12 minutes to talk about the context for marine ecology work here at NSF and where we see it heading in the future in part through interagency cooperation of the sort that Congressman Farr was just talking about.

Then I'll hand off to Phil Taylor who many of you will know is the lead program officer for Ocean Sciences Division Program in biological oceanography. Phil will talk about some of the ecosystem science that is coming out of NSF in the last couple of years and where he sees his program heading in support of ecosystem-based science.

Sorry. NSF's equipment isn't working very well.

We'll get it. While I'm doing this, one of the things

I did want to say is that it's a great time for me to be

with you and for you to be here recognizing the advent

last year of the Hawaii Marine Protected Area. Also all

of the items in the news that we read about about the severe

stresses on marine ecosystems in general and the living

marine resources in particular.

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Stresses that come from climate change, from increasing temperature and decreasing pH, from habitat degradation and outright destruction, and also from harvesting practices that are not really sustainable. You've seen some of the news, I think, about harvesting practices that are driving some fishery stocks to thresholds of unsustainability and that in the process are driving evolutionary change and changing characteristics in fish stocks in human lifetimes as a result of fishing practices.

These are all reasons that we collectively are interested in the whole question of ecosystem-based management. This is not a new interest of NSF. For almost a decade we've recognized the importance of Marine Protected Areas to sustain marine populations and ecosystems. We begin paying particular attention in 1998 with a series of Futures meetings that led to a couple of reports.

NSF we write reports and we like them to have titles with good acronyms so we have OEUVRE, which is Ocean Ecology, Understanding and Vision for Research, and APROPOS which

looked at the fiscal oceanography that underlies the

The next step was in the year 2000 when the

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biological systems.

ocean sciences put together a document called Ocean Sciences at the New Millennium. The challenge here was to identify the most important and promising opportunities for discovery and new understanding in ocean sciences over the next decade.

The framework was important interdisciplinary questions that can't be fully addressed until we can pursue the processes on the appropriate space and time scales with advanced technology. And population connectivity was highlighted in this report as an essential next step for marine ecosystem research.

Many of you will understand this better than

I. What Mark didn't tell you because I didn't tell him
is that my background is as a marine geologist. I've been
here for a year which is why Phil is going to be talking
to you about the biological oceanography science which
will be a good thing for everybody.

With population connectivity we are looking at how coastal circulation affects the dispersal of early life stages of marine populations and then the consequences of that dynamics for the spacial dynamics of the populations and the near-shore communities.

NSF recognized this as basic fundamental research in an area that is a bottle neck now for advancement in a lot of areas that have both basic and applied science implications. You

see some of those there specifically including Marine Protected Areas but extending beyond that as well of course.

This is an area of science that is exciting to NSF for a lot of reasons. It is very strongly interdisciplinary. When I say that, I mean not just that it connects my division's chemical oceanography, physical oceanography, and biological oceanography with biology, but it also pulls in some of the things that you were talking about just now with Congressman Farr, the economics, the resource management decisions, the linkage of resource management with recreation and the whole coupled natural human systems which is the direction that NSF is heading in linking the natural sciences with the human systems more closely.

Of course, there are just a whole range of great questions here that tie into evolution, to the ecosystem response to climate change, thresholds and non-linearity on ecosystem responses and a whole lot more. These are a lot of really good questions that mean that these are areas that are NSF as well as NOAA. NSF doesn't think of Marine Protected Areas or ecosystem-based management as something that should be some other dude's job. It is something that we see as part of our mandate.

Using cutting edge tools in a whole range of ways. We are developing new ones as we go but the integration,

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the use of and the integration of genomics, very sophisticated isotope and tracer geochemistry, new and developing in situ sensors makes us a very frontier area of study.

Of course, the modeling. Ecosystem modeling is a grand challenge that NSF looks towards as we think about why we would build a Peta-scale computing system andwhatwewouldbedoingwithit. Ecosystem-basedmodeling is one of those grand challenges. It's a challenge for a lot of reasons.

If you think about the birthplace of a larval species, their dispersal as a function of ocean currents, their well-being as a function of the biological and chemical climate, and then the long distances that some of these dispersals occur over, you realize that the scales are too large for a single investigator or a small group of investigators which is what NSF is most adapted to dealing with.

What you are looking at needing is some sort of aggregation of proposals that add up to a coordinated program that looks at the system in its entirety over a wide range of spacial scales but done in a way that respects how NSF works which is through proposals that survive the very competitive peer review system.

There are some financial issues involved.

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Ship-time costs are escalating so NSF is putting more money into ship time than we have but we can't offset the decrease in funding for ship time that comes from agencies like NOAA and Navy so there are fewer days at sea.

We anticipate that in situ technologies that are coming along can help with some of that but they are typically slow to develop and expensive as well. I will say that developing biological sensors and chemical sensors specifically for marine ecosystem studies is one of the priorities, one of the near-term priorities for the ocean research priorities plan which I'll talk about in a few minutes.

And the kind of multi-disciplinary studies that are necessary to really get at the science are also expensive. You see some cost issues that we are struggling to deal with as Phil's program funds these kinds of studies and would like to do it in a more orchestrated and large-scale way.

There are some other issues. Building in truly interdisciplinary communities is slow and understanding the ecosystem interaction factors make modeling very challenging intellectually so that the Peta-scale grand challenge for the modeling isn't just on the computing end. It's on the intellectual end as well. Then changing ecosystems makes this even more difficult to come to grips

with.

Fortunately we have some friends and this is some of the stuff that Congressman Farr was just talking about, the Oceans Actin 2000 which led to the Ocean Commission Report in 2004 which came out at about the same time as the Pew Commission Report. I think as Congressman Farr emphasized, both of them noted very strongly, very unequivocally the central role of the oceans in the health, well being, and prosperity of the nation.

The critical role of ecosystem-based management for dealing with water shed, making decisions in water sheds and coastal oceans, and the absolute need for basic science research that would underpin that ecosystem-based approach to resource management. This administration issued the Ocean Action Plan in December 2004.

In that was a specific call for a basic research program designed to address ocean questions that related directly to societal needs. That led to what is called the ocean research priorities plan charting the course for ocean sciences in the United States for the next decade. This is meant to be a national plan that involves federal, state, and local agencies, industry, NGOs, and academia in a coordinated way.

As part of that ocean research priorities plan 25 agencies plus 150 people from other sectors came together

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and said what are the most important things we need to be studying in the next decade about the ocean. There were six different societal themes three of which tied to ecosystems.

The first set of priorities is stewardship of natural and cultural ocean resources. This is on the website. I won't walk through it with you but I just want you to know how important resource abundance and distribution, interspecies and habitat species relationships to support forecasting, the human use patterns that may affect and influence resource stability. Interaction of basic science with the social sciences to do fundamental research on the sustainability of living ocean resources.

No. 12, the one in the middle here, is the impact of climate variability and change on ecosystems and basically how change propagates into ecosystems. There is one that specifically improving ecosystem health where you look at No. 14 and go, "Wow, that's everything." It's a very big, very broad topic. Understand and predict the impact of natural and anthropogenic processes on ecosystems.

Then apply that to develop socioeconomic assessments and models to evaluate the impact of human use on ecosystems, some of what you were talking about before. Then develop metrics for sustainable use and

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effective ecosystem management.

Those are three of the six societal themes that are part of the ocean research priorities plan. This plan was developed to try to shape the FY '09 budget for the federal agencies but OMB surprised us and they said, "If we had money to spend in FY '08 where would we spend it?"

These 25 agencies got together and solicited input from the various members on what we would call near-term priorities. These were meant to be areas where we could make significant progress in two to five years where there was a strong need for interagency cooperation to make these things happen.

Gosh, I just forgot what I would going to say. So strong interagency and -- oh, an urgency to the science. Out of something like 16 suggestions 25 agencies actually agreed on four priorities one of which is called CAMEO, Comparative Analysis of Marine Ecosystem Organization.

You can see the premise here which is that management of marine ecosystems can be improved by determining the underlying dynamics of these systems at a variety of scales. In the 2008 President's budget request there's \$5 million for NOAA and \$5 million for NSF GEO to pursue the goals of this, which I'll talk about a little bit more in a minute.

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Now, in total there was \$40 million worth of new money in the President's FY '08 budget for near-term priorities related to the Ocean Research Priorities Plan. So CAMEO itself is the first steps to link the data obtained through integrated ecosystem assessments with research that understands how human and other pressures on the system change the state of indicators of ecosystem health and state.

development of advanced modeling frameworks that extend to existing approaches, application of those modeling frameworks to represent a set of marine ecosystems, that is, Marine Protected Areas. comparison of existing Marine Protected Areas as a management tool focusing on key-size questions that underpin how they are used. In effect, the ecosystem-based management as practiced in Marine Protected Areas really doing the job that we want ecosystem-based management to do as we move through it more nationally.

Those are three major themes for CAMEO which will begin, we hope, with funding which we absolutely expect to begin flowing on October 1st of this year maybe. I'll just leave you with the fact that a CAMEO steering committee has been established and you can see the numbers down here some of whose names you'll recognize.

The purpose of the steering committee, which

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is a strong blend of academics and agency types, is to develop the specific research priorities for getting after the goals of this plan; select two or three candidate regions, that is, the MPAs for the MPA part of it; develop specific RFPs to inform the funding agencies and organizations; and outline a structure and operating principles to oversee the program and effectively allocate resources.

This is all sort of Government speak in a way but I think it's testimonial to the level of planning that is going into making CAMEO a reality should the funding begin to flow in FY '08.

I think with that I'll leave it except to wind up by saying that you see the Marine Protected Areas as a haven but also a test bed for ecosystem-based management. With that I'll hand it over to Phil. I'll be here for questions after Phil.

DR. TAYLOR: That was a great introduction. What I want to do is give you a little bit more flavor of what's going on specifically in the Division of Ocean Sciences now with regard to science that relates very clearly to MPAs on the horizon or ecosystem-based management and what we hope to be doing in the future as well.

First of all, I'll just say that clearly we now that we are harvesting living resources of the sea.

We know we have a pretty big impact. We need to know

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much more from a basic science perspective to see if we really can bring them back, conserve them better, preserve them or restore them and the like.

Julie talked a little bit about population connectivity. We don't have an initiative that specifically relates to MPA science, basic science or ecosystem-based management but we are doing a lot of science in the context of the Ocean Sciences Division already while at the same time trying to work with the academic community, work with other agencies in the Federal Government to create the atmosphere for the flowing of funds towards what we all consider to be an important problem.

Population connectivity, as Julie said, is one of those important areas that we have been working with in the division, particularly biological oceanography and physical oceanography. Clearly there is a critical need to understand populations at a spacial scale that we haven't really been focused on in the oceanography realm for quite a while. That is why those sorts of questions of a basic nature are so relevant to MPAs.

MPAs are generally thought to be in a spacial context, although they don't have to be but they generally are. Whereas oceanography in the past has often been concentrating on the fact, except on the geological side, that the ocean exist as a fluid entity and special isn't

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always -- hasn't always been as important a construct in the thinking. We need to change that.

We have a lot of good examples of research that we have been starting up. I should step back and say that after the population connectivity theme became so prominent in discussions of the Futures meetings back in 1998 and then reiterated in the 2000 Millennium Report, the biological oceanography program and physical oceanography program at NSF decided they wanted to make sure even though there wasn't new funding available that the community knew that this was an important area for NSF to be investing in.

It was an area that was not simply a NOAA responsibility. While it related to things like fisheries management and MPA there is fundamental science needed and NOAA cannot be expected to do it all by itself. There is an academic community that has the intellectual resources to help drive that type of science.

Anyway, I just wanted to give you a little flavor and you probably have this to look at later but some of the projects that we are currently funding from in the Ocean Sciences Division. Here's one on population connectivity issues within the Florida Key system. Sue Sponagle and a number of her collaborators at the University of Miami looking at these important questions that relate

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very directly to issues of sustainability in marine resource population.

Another one that comes out of a large program at the foundation called Biocomplexity that had a good run and is just ending this year actually. One very large program headed up by Dan Bambaugh, American Museum of Natural History but involving a number of institutions and scientists around it. Focused very directly on the coupled natural human system of the created Marine Protected Areas in the Bahamas and the ecology of the Bahamas as well.

There is a group that has been working very closely with trying to understand how these systems, these Marine Protected Area systems work, whether they are useful, what the human impacts are, the human, social, and economic impacts.

They have been looking at also the fundamental ecology and evolutionary ecology with regard to populations and how related they are across fairly large scales. In this case Melinda Olson, Steve Palumby and others are looking at the genetic relatedness across the Caribbean and western tropical Atlantic and how that relates to the issue of connectivity of population.

On a smaller scale here we have a little project that just recently was started by Mark Hixon also looking

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at the Bahamas but at a much smaller scale. Probably on the order of 100 kilometers at most. Less than that actually. Trying to understand, again, the connectedness of populations that are an important resource and use that information eventually for the management of these resources.

Then on a much larger scale, and really thinking about connectivity more from an evolutionary perspective, because, as Julie just said, we know that the harvesting of resources now is actually causing evolution in those resource populations. It's not a geological time frame but it can be a human time frame.

We know that fisheries are actually causing changes in fish populations. Anyway, here is a project you can look at a little bit later with Michael Hellberg and Iliana Baums looking at across the tropical Pacific and trying to understand how coral populations are connected now and over recent evolutionary times. This theme of population connectivity is kind of a term and might not resonate with you specifically but it very much relates to the issue of population and spacial context.

One of the reasons why we are ready to do much more in this area is because we are making advances in some of the technologies from the physical and biological modeling that is being driven both by the intellectual

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integration of biological oceanographer's climate scientists, physical oceanographer, but also advances in areas like geochemistry and how we can use markers in muscles or in fish odoliths, muscle bivalves and their calcium carbonate indicators in the protocon.

To understand the trajectories that larvae take over their life history and how that interacts with the physical realm of the coastal ocean. Trace metal geochemistry methods have also been an advance. We are studying systems in this light from coral reefs where there are protected areas we've talked about, estuaries. There are protected estuaries now.

Shelf seas and even to hydrothermal vent systems.

Lauren Mullineaux had a big project on understanding connectivity in the fauna that live in hydrothermal events.

There are increasing interests in deep sea areas, human impact on deep sea areas, deep corals as well as hydrothermal events. So a need for thinking about this type of science even at those more inaccessible realms.

We have also had some progress along this line in a general NSF activity called IGERT, Integrative Graduate education and Research Training Programs. Steve Gaines.

I'm sure you know the name Steve Gaines from UC Santa Barbara who was one of the winners in the IGERT competition to put together a research and training activity that has

a large focus on Marine conservation and Marine Protected Areas. He's just one of many people involved with training the future scientist, both Ph.D. scientists all the way to undergraduates, to deal with some of these complex questions, interdisciplinary needs in conservation biology.

Beyond that you've heard about the Pew Commission, the Ocean Commission Report, what they've been calling for. I won't go into all the details on that but one of the things that's important from my perspective as a program manager and is resonating elsewhere in the division is that we have to recognize at the NSF that there is great fundamental science to be waged relative to preserving, managing living marine resources.

We need to start thinking as a community in the academic world as well as in the federal sector about the cultural system that we have that has often in this country and elsewhere, it's not uncommon, where you have a resource agency like NOAA separated from a basic science agency like NSF when in reality we know that the academic oceanographers and climate scientists and marine ecologists and evolutionary biologists need to be working with the excellent fisheries oceanographers, fisheries ecologists in NOAA in order to make progress much quicker and much more effective in this area.

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This is why this theme of science came very strongly out of the Futures reports and is very much a priority in biological oceanography right now working with others in the Division of Ocean Sciences, particularly physical oceanography and others in the Federal Government, particularly NOAA and the National Marine Fishery Service.

CAMEO is maybe the first step in that in really engaging a part of NOAA that NSF has been involved with at the scientist level for quite a while, that is the part of the NOAA being the National Marine Fishery Service, but we have never been involved with them in more of a Washington, D.C. based science management point of view. We've been involved with them in GLOBEC in the harmful algal blooms area for a long time but never working directly with that part of NOAA as an agency.

Anyway, great science ideas that have to be explored, have to be broadened, tested, challenged with research that both the academic and federal sectors are needed to attack. And also, I should say, one of the challenges in CAMEO and one of the challenges we have in the Division of Ocean Sciences for ourselves is to work much more closely with those social behavioral and economic sciences in order to make progress.

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Okay. I think I'll leave it at that. There are clearly in this sort of overall area of science clearly different types of themes, population type of themes that very clearly relate to Marine Protected Areas in a spacial context, but also other types of scientific questions or themes from ecosystems to evolution, as I mentioned, to climate impacts and, the last one, as I just mentioned, coupled human natural systems.

Not just what we have been dealing with for the last couple decades in harmful algal bloom research or GLOBEC, global ocean ecosystem dynamics, not just asking the question how are the managers going to use the basic science information that we derive but getting engaged directly with social sciences, behavioral sciences, economic sciences and having their questions, their scientific questions elevated to a level of ours so that we can really integrate those themes and make progress that will allow the efforts of a committee like this to print out reports that engage the policy makers effectively and convince them that, yes, there are social reasons to create MBAs.

There are economic reasons. Here are our models. Here is how we assess whether these models are good or not. Here is how we come up with estimates about the economic costs or economic benefits of the decisions that we think

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need to be made.

Anyway, that's it. I won't go on any further.

Any questions for Julie?

MR. PETERSON: Max Peterson.

CHAIRMAN HIXON: Just a bit before -- just a little bit of context before we get into this. This idea of population connectivity, how it relates to Marine Protected Areas is if an area is set aside and say the fish in that area are spawning, what happens to their larvae?

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Does larvae drift away from the spawning population? Does it seed areas outside that MPA? Does it seed areas inside or to another MPA? Connectivity at an ecological perspective is an extremely important issue for MPAs in natural resources that NSF is actively working on.

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Max, first question.

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of an overwhelming thing that you lay out here because

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obviously some of these questions won't be known for 100

MR. PETERSON: I'll just say that this is sort

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years. The question is we're dealing with MPAs and I would really like to know from you all what role you think the

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MPAs, Marine Protected Areas, can play in answering some

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of these questions like the one that Mark asked right now.

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It seems to me like before we understand the entire ecosystem,

which is only one, somebody needs to figure out a way to deal with the thing on a smaller scale. Anyway, how are you looking at that?

DR. TAYLOR: Well, okay. If I understand your question right, and I'll rephrase it and say that you're asking how science might benefit by the creation of MPAs.

MR. PETERSON: Well, maybe how society might benefit from it and what role science might play in making that come about.

DR. TAYLOR: Okay. Let me answer my own question first. MPAs offer scientists the opportunity to be thinking about experiments at a much larger scale than they have in the past. When we set up an MPA we are altering the system, the overall coupled system so that scientists can say, "Okay, we've made this change. What happens?" Science can help to establish the efficacy of MPAs. One of the reasons we think about MPAs is because we want to conserve resource populations or we may want to preserve habitat.

Let's look at populations. The dogma has been that larvae from marine animals are spawned. They are carried with the ocean currents and they go all over the place and part of the reason for thinking the MPAs might be useful is because if you protect part of a resource, part of a population, you sustain a healthy reproductive output.

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Now, that may well be a very effective mechanism
in some species and it may not be in other species. We
know now that in some species when the gametes respond
and the larvae drift off that only certain ones of them
are ever going to make it. We know now that it isn't in
some cases a random process at all by the basis of science.
We used to think there's a million spawn and the chances
are .1 percent are going to make it but that's enough to
sustain the population.
We know from basic ssience from work on ovsters

We know from basic science from work on oysters recently, work on sea urchins recently, that the ones that succeed actually are very similar to one another and different from the ones that don't succeed. We can then start thinking about asking better questions about science and answering questions as to whether or not a given protected area might be useful in sustaining a particular type of population. That's just one example. Clearly habitat protection, which is a major issue in resource management and research conservation, is another area where Marine Protected Areas can be tremendously valuable. Does that answer your question?

MR. PETERSON: Thank you.

CHAIRMAN HIXON: You have to use the mic. This is a federal Advisory Committee.

DR. MORRIS: You know, it's funny, Max, because

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Mark asked a very similar question to yours at our last Advisory Committee meeting when briefed about the ocean research priorities plan. He said ecosystems are such a big complicated multifaceted widespread system how is it that the ocean research priorities plan has near-term priorities that speak to ecosystems?

The attempt was really there to -- the recognition is that ecosystems are so important in the way we need to work with the oceans that we tried to carve out small pieces that could be tractable. One of those small pieces is developing sets of biological and chemical sensors that provide a better observing capability for marine ecosystems.

Then the other was to try to use the Marine Protected Areas themselves as that test bed. Studies in the marine areas and in adjoining areas to look at the differences and specific aspects of health of those ecosystems. There is an attempt to try to break it down into smaller pieces within the research priorities plan that can be tractable. You're right it's an overwhelming challenge to figure out how to make the pieces manageable but still add up to the whole.

CHAIRMAN HIXON: Thank you.

Tony Chatwin.

DR. CHATWIN: Thank you, Mark. Thank you both

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for the presentation. I found it extremely informative. I commend you also for this attempt to address societal questions I think is really important. My question goes more to sort of it was very clear on how you are building a program seeking funding to get the information you need to address the questions that you have enumerated.

What wasn't clear is what is your expectation or the National Science Foundation when it engages in a program like that? What is the exception if generating results that will indeed then inform answers to those questions. You talked a near-term budget need in maybe FY '09. A project like CAMEO, for example, how long is that expected to last before those questions are addressed? I have a second part to that question also.

DR. MORRIS: The near-term priorities are meant to make significant progress in two to five years. The thought is that they would be -- there would be a steering committee that would be continually assessing the progress but that at three to five-year time there would be an external review of how much progress has actually been made. In this case I think OMB is going to hold everybody's feet to the fire.

The expectation, or rather I should say the hope is that '08 money would be followed by '09 money followed by '010 money that would be distributed across a wider

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swath of agencies. But for that to happen they really are going to have to deliver which means that the questions, the specific questions asked, are going to have to be targeted to things that are both important and where significant progress really can be made in a few years.

DR. CHATWIN: Thank you. Then just another question that is related to this. You presented a number of different RPs, research priorities. I wondered how we can gain access to information that is being generated for each of those research priorities. What is the determination of those results and how can we gain access to it?

DR. TAYLOR: At this point, of course, there are no results. There are only research priorities stated. There are four priority areas articulated in the '08 budget in the hope the money will be flowing. The results will come out in many different forms. Clearly the NSF is what we often hear described as a non-mission agency so one of the big products that we have, of course, is peer-reviewed publications.

We are engaged with other agencies that will using information and putting it directly into management schemes. A good example from a few years back in the GLOBEC program. We had spatially -- we had funded research on spacial modeling of organisms on the Georges Bank.

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Less than five years later that modeling became instrumental in the establishment of the Marine Protected Areas involved with the scallop fishery off Georges Bank. Things get entrained if they are successful or if they look like good experiments into that sort of a system where the managers start to use them. Does that answer your question?

DR. CHATWIN: Yes. Thank you.

DR. MORRIS: And, Tony, I think there were two things going on in this talk at different stages. One was alist of many different themes under titles of population and evolution. Those are some of the things that NSF is very interested in in its routine programs. Those are things that are part of an open solicitation to the Biological Oceanography Program for each of our proposal deadlines.

For the Ocean Research Priorities Plan, near-term priorities with CAMEO being one of them, there will be a request for proposals specifically aimed at that opportunity. The way that people will hear about it will be through town meetings and briefings and the websites of the agencies involved.

At NSF the Oceans Sciences Division frequently sends out what we call a candygram, a letter to everybody who is in our database, and that opportunity will be noted in the candygram and

sent to everyone who contributes to NSF. I think the other agencies that are involved will be doing similar things.

CHAIRMAN HIXON: Wally Pereya.

MR. PEREYA: Yes. Thank you, Mark. I very much appreciate your presentation. Wally Pereya. I'm from

appreciate your presentation. Wally Pereya. I'm from the North Pacific. My question -- I have two questions. First one involves the CAMEO program. I notice that at some point in that exercise you are going to get an opportunity to evaluate the efficacy of MPAs in terms of creating a better marine environment. There has to be some endpoint which you will be able to measure.

Will you be able to and do you have any plans to reverse the process and given an outcome which you hope to achieve determine whether or not MPAs are the most cost effective way of getting there as opposed to other ways of dealing with man's footprint in the ocean so to speak?

DR. MORRIS: That is certainly one of the goals of this exercise. How we actually get from sort of the generic statements to the specific plan that allows this to do that is still being worked out. In fact, it's the steering committee for the program which is sort of half federal agency, half others, who will be charged with figuring out exactly how to do that. Your Mark Hixon is one of those steering committee members.

I think helping develop a step-wise plan that

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allows us to evaluate the efficacy of MPAs and doing what we think they are doing and as a source of best practices for ecosystem management elsewhere is certainly a goal, a societal goal for CAMEO itself. Your advice should go to Mark and to Phil and to the others who sit on that steering committee.

MR. PEREYA: The big follow-up question. This one is more than just a burning intellectual exercise that has some practical significance. In the North Pacific, specifically the Bering Sea, and then down off of the Washington/Oregon/California and that current system there are two major nekto/benthic species.

In the Bering Sea we've got the Alaskan pollock.

It is by far the most dominant resource there. It's harvested sustainably off the Oregon/

Washington/California coast. We've got the Pacific whiting which is a very dominant catiod species.

Now, in the North Pacific the way in which it's managed there is a 2 million ton maximum cap on removals in any particular year all the species combined and the totals for the individual species, the acceptable biological catch always totals more than the maximum that is allowed. Certain species like the Alaskan pollock in years when there are very strong year classes tend to be under-harvested relative to the ABC. In fact, two years

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ago we under-harvested the pollock resource by 800,000 tons.

The total catch was 800,000 tons under what the conservative biological estimate was that could be taken on a sustainable basis. Off the Washington/Oregon/California coast with Pacific whiting that has not been the case. In fact, they probably have tended to because of the U.S. Canada impasse to over-harvest in terms of the ABC.

Now, the question is will you be able to look at what the negative effects might be from under-harvesting a dominant species in an ecosystem such as something like the Alaskan pollock? I think you have a potential experiment, real-life experiment which has been set up here, by the way, in which these two major stocks have been managed.

DR. TAYLOR: I would say I'm pretty much out of my element in thinking about the real management of marine resources, the practical aspects of it and the role of the Federal Government and the Fisheries Advisory Committee and that sort of thing. When you say the negative effects, that is perhaps something.

You saw that CAMEO largely in the early stages will be very much geared towards development models that have some robustness that can be used in many different types of systems. That is the ideal. I would say the example you give if the

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models are developed, ecosystem models, or Marine Protected Area models, that are robust, are adequate for the task, then they should be able to look at that balance or disbalance of over-harvesting, under-harvesting and see what the responses are in the ecosystem.

If those models were actually coupled to some economic models, they would allow that sort of experimentation as well. Clearly what you saw as the first stages of CAMEO will have a large measure of its attention on models and experimenting with models to answer questions about the efficacy of MPAs or other types of ecosystem-based management choices as well.

Clearly if Steve Moroski, our counterpart at NOAA, were to be answering the question, he would probably give you a more satisfactory answer because he deals with these issues of the intersection of science and management all the time. I don't.

MR. PEREYA: This will probably be a good opportunity for interplay between your organization and NOAA on this because there are two very significant modeling exercises, one in the Gulf of Alaska on the pollock resource there by the COFI people. The other is the very significant modeling that is done on the Alaskan pollock resource itself. It's a multi-variate model that they've developed that is quite interesting and I don't know how that might play

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DR. TAYLOR: You saw one of the steering committee members was Ann Hollowood who is probably intimately involved with that in the North Pacific from NOAA National Marine Fishery Service.

CHAIRMAN HIXON: There is also a lot of modeling going on with the role of Pacific hake or whiting in the Northern California current system as well. A lot of work in NOAA on this particular area.

Okay. We need to move along. Mike Cruickshank.

DR. CRUICKSHANK: NEPA was passed in '69. Every industry or activity in the offshore, in federal waters anyway, has been subject to an environmental impact statement. There are hundreds of them, thousands maybe, for all these oil wells and everything else. These are basically done by NOAA I guess and the Federal Government.

The oil companies have also done their own environmental analysis and such. Is there any mechanism to utilize and cover the whole United States? Not only the oil and gas industries but with the mineral industries the Government has done other studies through NMFS on the potential of minerals offshore.

These exist, as far as I know, in boxes somewhere in some basement. The amount of money spent on this has

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been hundreds and hundreds of million dollars. Is there any way to utilize these things in developing this interaction between the different areas and just the general work that NSF has been doing as well as NOAA and the NMFS?

CHAIRMAN HIXON: So your question is can we make use of all these environmental impact statements from the past and data that are archived therein?

DR. CRUICKSHANK: Right. As an aside, from the MPA's point of view, I mean, we have had kind of hands

DR. CRUICKSHANK: Right. As an aside, from the MPA's point of view, I mean, we have had kind of hands off from the Interior as far as the audit is concerned and the activities. It covers large areas. It surely must be available to be utilized.

DR. MORRIS: You know, it's an interesting question you pose. Where I thought you were headed, which is where we spend a fair bit of time these days, which is that under the NEPA rules basic research has a categorical exemption from the requirement for environmental impact statements. Where that's changing is the use of acoustics in the marine environment particularly relating to impact on marine mammals.

We spend a lot of time trying not to have to file an environmental impact statement except where there is a specific need. The idea that there is a lot of information in there that can be harvested sounds like a great project and something that I think the steering

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committee could take on board as maybe an intern's project or something that begins to create an inventory of information that exist in Marine Protected Areas as part of building up to the modeling efforts.

CHAIRMAN HIXON: Thanks, Julie.

One last question. Dave Benton.

MR. BENTON: Thank you, Mark. Dave Benton. I'm also from the North Pacific region. I also serve on the North Pacific Research Board and we are engaged right now in developing a project jointly with NSF on the Bering Sea. It's called the Bering Sea Integrated Ecosystem Research Plan, I believe. There's about \$50 million combined.

I'm just wondering how does this CAMEO effort, if it does, fit in with that effort because there's a fairly significant both in the water science program plus modeling that is supposed to take place with the reserve program.

I'm just curious how those two fit together or are they very separate?

DR. TAYLOR: I would say that they are not totally separate but clearly the time scales of their development are off at present. BEST is an activity that has been anticipated for some years. CAMEO, as you can see, is very much developing, although in the write-up I have specifically knowing NSF's activities mentioned the Bering

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2 thought about. CAMEO clearly has said that we will be looking 3 4 at representative systems of all sorts from coral reefs 5 to coastal regions. We haven't really chosen the deep 6 sea. The Bering Sea has been specifically mentioned but 7 how they intersect directly I can't say at this time, but in terms of the information that is derived from one that 8 feeds the other into the future, that's the most general 9 10 possibility. Thank you, Julie and Phil. 11 CHAIRMAN HIXON: 12 We are going to take a 15-minute break. We are reconvening at 11:00 sharp. Thank you. 13 (Whereupon, at 10:45 a.m. off the record until 14 15 11:05 a.m.) 16 CHAIRMAN HIXON: Okay. We have got to get 17 started. We are going to start heading into our actual work for this session. We are going to begin with Joe 18 19 Uravitch and Jonathan Kelsey speaking to us on FAC/Public 20 Comments on Draft Framework and Next Steps which is what 21 we are going to start taking soon. MR. URAVITCH: Okay. Thank you, Mark. 22 23 good to see all of you again on our continuing journey towards the development of a national system of MPAs. 24 25 I just wanted to acknowledge really the yeoman's work that

Sea has one of those areas of attention that should be

Jonathan Kelsey has done in putting the framework together and starting to work with the comments and all the efforts that led up to where we are, as well as the work of the Advisory Committee both with their first set of comments which led to the draft document as well as the comments that came of the October meeting to continue to move us forward.

As a result of that we decided between that and the public comments that we received that it was really critical for you all to weigh-in now during this Advisory Committee meeting on the framework itself in terms of priorities and various issues so that there is an opportunity for you to help shape the next version of this document. I'm going to leave it at that since we are running way behind schedule and then pass this on to Jonathan. We appreciate you taking the time to help us move this thing forward. Thank you.

MR. KELSEY: I am going to take advantage of all these technologic spoils of the National Science Foundation while we have them. Charlie, the security guard confirmed that he will be checking bags of NOAA staff as we leave each day. Especially those bound for Santa Cruz.

For the next few minutes, and I'll try to move through this as quickly as possible. I want to provide some background on where we've come from over the past

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couple of years. Talk about the public comments that we heard, how that translates into some of the bigger picture issues and considerations.

We want to go back to the table and think about some more as we work on revising the document. And how that translates directly into the work that you all are going to be doing over the next couple of days to provide some additional input.

Charlie always reminds us it's good to recall where you've come from and where you're going as you start these talks. You will recall in 2005 the MPA Center embarked on roughly a two-year national scoping process to talk to agencies, stakeholders, public, all different kinds of organizations about their views on what a national system should do, what it should accomplish, and how it should function.

The Advisory Committee's report in 2005 was a key element of all that input we received during that two year scoping period. At the end of that scoping period we produced the draft framework document, published it, and released it in September of 2006 for roughly a five-month public comment period which ended the end of February 2007.

The FAC comments you all ventured into uncharted territory using the web and teleconference forum to provide

some comments on the draft document which were very useful and instrumental in us thinking of this charge that we are going to be talking about today and working on at this meeting.

That brings us to here. We are in April in Arlington and looking at some additional products and input that will help us this year to revised the draft framework, develop a final one, and publish formal response to comments based on all of those comments we receive.

We are hoping that we'll publish the final document by the end of 2007. Then your recommendations that you will resume working on and deliver in October of 2007 and those beyond will form the implementation of that final framework as we move into 2008 and thereafter.

So, who did we get comments from during that public comment period? Then I'll talk a little bit about what the nature of those comments were. Over the five months we received roughly 102 individual comments, about 11,000 e-mails. Those 102 individual comments were unique comments. The disparity between those two numbers is that there was one petition site that was set up where we received the same comment about 10,900 times from individuals all around the country, all around the world.

DR. AGARDY: Did you get it?

MR. KELSEY: I got it and it's still coming.

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I can't get them to stop, even though the process is closed.

You can see here we got comments from state and tribal governments including Coastal States Organization, Northwest Indian Fishery Commission, and a bunch of individual states. About two dozen conversation and industry organizations submitted comments and a number of private individuals around the country.

We even tapped into some heretofore unheard from MPA stakeholder groups like these folks

-- I'm not sure if you can read this -- at the State Correctional Facility at Smithfield, Pennsylvania. We also received some from other in Indiana and other folks.

Our outreach got there apparently and beyond where we had initially intended.

On to the others that we heard from. Commercial and Recreational Fishers and Industry. The Advisory Committee comments, the ones that you all submitted, and some from individual members of the committee. Five fishery councils and one commission submitted comments. Some comments from academia and some others. You can see here the kind of smattering of the range of comments that we received from these various folks.

What did we hear in these comments? Comments were received on nearly aspect of the framework starting at the level of a general comment on the national system

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as a whole, general comment on the framework as a whole, and then down to almost every aspect of the framework itself, goals, definitions, nomination processes, state and tribal roles, etc.

Some commentors noted simply that MPAs were unwanted in their backyards. Other said, "We would like to close off large portions of the U.S. coast to extractive activity." We got a real wide range of comments. At any of those levels, whether the national system level or one of the components of the framework, we got a range of perspectives; that it was not needed, it was good as proposed, or that there was some amount of improvement that was needed, a little or a lot.

It's very complex to sort through and we've done some preliminary analysis on there and tried to pull out some of the big issues. I think the Advisory Committee nailed a lot of the big issues in the comments that you all submitted. Those big picture issues are what are driving some of our new approaches and solutions we want to explore for revising the framework and what we want to hear from you all during these three days.

Some of those big picture issues. From the comments we received we have also been doing some research on how other national systems are effective. Both NOAA and DOI have been looking into what makes up an effective

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national system. That's informed some of these big picture issues as well.

The first is the scope of the system. As currently proposed the framework in the national system is really attempting to achieve these all-encompassing goals and objectives. Not only are we attempting to achieve these all encompassing goals and objectives but we are doing it all at once. Little bit overwhelming. We have little or no prioritization about those objectives. That was one of the big issues.

That scope of the system issue runs into the size of the system issue. Doing everything at once would result in bringing in a large number of sites at once into the system and it could render it difficult to manage the system to be effective and to deliver some of the kinds of benefits and look for the gaps as are called for in the document itself.

You heard this large number of sites and the size of the system is an issue. We also heard there is a lot of benefit from the various types of MPAs that are out there right now whether it estrian research reserve or a no take area that is around a spawning aggregation. That inclusiveness of the system is an important theme and that comprehensive principle is important to maintain. That was the second big picture issue.

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emphasis on identifying and filling the gaps. This somewhat runs from the size of the system that bringing so many sites in we would be focused all on existing sites. We wouldn't be looking at where are those gaps and meeting those goals and objectives that we laid out. We need to have greater emphasis from the comments that we're hearing on filling gaps and identifying these new areas as they're needed.

The final big picture issue is about having a better process, a clarified process for identifying and providing priority support to MPAs that become a part of the system to both improve the effectiveness of those MPAs but also improve the effectiveness of the system as a whole.

These big picture issues along with what we've been understanding from these other systems that are out there and working well resulted in identifying the following potential solution or mechanisms that we would like to explore for incorporating into the framework and ultimately being implemented to build the national system over time. These directly relate to the charge that you all have for this meeting and I'll get more specific into that charge in the next slide.

These potential set of solutions could work in concert together to address those big picture issues.

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I have to say work in concert together and emphasis that because none of them are a silver bullet. The situation is just too complex out there. There are a lot of sites, a lot of existing programs, and there are gaps that have to be filled. There are a lot of assistance needs out there as well. The idea is that these work in concert with one another to address those big picture issues. It's not one or the other.

The first issue or mechanism we would like to explore is prioritizing the national systems conservation objectives and working iteratively over time meaning that we would focus on the highest priorities first looking at both existing sites and gaps as they relate to those highest priority objectives. This would have the system starting small and growing over time as capacity allowed.

It's not an exclusionary approach that would limit the size of the system but it would allow it to grow over time and be able to have the capacity to respond to bringing new sites in and still being able to dedicate resources and look at where the gaps are relative to these objectives. Of course, we want to be heard adactively, reassess and prioritize these objectives over time. That is an important thing.

The second solution that we want to explore

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would be management criteria, things like a management plan or a monitoring program or an education program that could serve as either -- and that's an important either -- a filter for sites entering the system in that they must meet those management criteria to get into the system, or a way to assess assistance needed by MPAs once in the system.

Sites are allowed in but then they are assessed against these criteria and the areas where they need to improve are identified and support is provided to try to improve those sites. They could be either one or the other or a combination of both these management criteria could serve.

We think this might be a way to better outline a process for setting priorities to assist MPAs in the system and whether as entry or assessment criteria would result in improving the management of MPAs in the system whether before they get in or after and it would result in improving the management system as a whole.

The third potential solution we want to explore would be a set of user friendly categories within the system that would be based on general conservation purpose of the areas and level of protection of the areas.

This would help us to group like sites together within the system and better communicate and understand

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what the system is doing, what the system is accomplishing, and look at where there are gaps. It would also allow for a diversity of sites to be in the system but be able to tell several stories about what those sites are accomplishing by grouping them.

Maybe I could just finish one point quickly.

A number of systems that we've looked into use these kinds of categories whether it's the Marine Life Protection Act, whether it's the Great Barrier Initiative, whether it's the Great Barrier Reef Marine Park, whether it's the National Trial System. There is some kind of categorization within the system communicating what the sites are doing.

CHAIRMAN HIXON: I'm sorry to interrupt but I just wanted to make sure that everybody knew if you're in Ad Hoc Subcommittee C, any of those, that's No. 1 there. The second one would be Ad Hoc Subcommittee B. Ad Hoc Subcommittee A is the bottom one on that list.

MR. KELSEY: Are there any other questions right now? So this sort of breaks it down. I know that subcommittees are changing a little bit, maybe are merging, so I'm not exactly sure what the latest correlation is between these products and how you all are going to be organized. Those solutions you are going to explore directly relate to the input that we're asking for.

We are asking for a prioritized list of national

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system conservation objectives for each of the conservation roles and you are broken down into Natural Heritage group,

Cultural Heritage group, and a Sustainable Production group.

What would result, for example, for the sustainable production goal, and this is purely an example, would be some list of prioritized discreet achievable objectives for the goal of enhancing sustainable production using MPAs.

They could look something like the highest priority would be conserve spawning aggregations of commercial important species. Down on the list might be something like conserve use of unique habitats relative to or important to commercial species. What we are asking for is some list, five or six of these kinds of objectives in prioritized order for each of these three goals.

The second of the products that we are asking for would be a list of those management criteria that could be used again either as entry criteria for the system or evaluative or assessment criteria for sites once they get into the system and looking at what kind of assistance those sites need. Those could be things, like I said earlier, management plan monitoring program, a mechanism for stakeholder input, etc.

The last recommendation or piece of input we are looking for and asking for is a set of MPA criterias that would be based on MPA purpose and level of protection

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for use of grouping sites within the national system. These are just some examples or things we've made up. I think one or two of them might have something to do with the MLPA initiative, but they could be things like marine heritage area, marine heritage reserve, breaking down the system to be able to tell the story about what the sites are accomplishing and grouping the like sites together.

So let me see where we are here. The next three slides are going to attempt to illustrate in a simple way something that is kind of complex which is how would these pieces of information that you're going to be working on be incorporated into the framework and implemented to build the system over time.

I want to forewarn you that a little bit of imagination is needed here. I was watching this PBS documentary last night on the Hippie generation. There was something like "free your mind." Relax a little bit but not too much because we've got to come back and do work very soon here. Just bear with me for a few minutes. Keep the charge in mind and we'll try and walk through this.

The first of these slides just tries to simply illustrate what we're talking about as far as this prioritized list of objectives that would be implemented over time iteratively. Those objectives could be grouped

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together in phases or a phase could just have one objective. For each track, or goal, Natural Heritage, Cultural Heritage, and Sustainable Production, we would break those objectives down and implement the highest priority objectives first followed by subsequent priorities and later phases.

This isn't necessarily a statement that those objectives that would be implemented in phase 3 are less critical to an overall approach to marine management, but it might mean that the information to make these kinds of decisions about that objective is very difficult and requires a lot of research. We could make some incremental gains up front if we focused on some of these higher priorities where there's more robust information available.

This is how they would be implemented over time, broken down into phases and worked on iteratively. For each of these phases there would be three tasks associated with working on them. The first task would be identifying those existing MPAs that contribute to that objective.

For example, say we are up here talking about spawning aggregations, identifying all of those areas that currently protect spawning aggregations, nominating them, bringing them into the national system, and looking at the kinds of assistance that's needed by those sites, if

any, that the system can provide working together.

Then we would also be looking in a parallel track at identifying the gaps in that objective as well. We would not only be bringing in those existing sites but also looking at where the gaps are for these phase objectives over time. I don't want to beat a dead horse.

Do folks get what I'm saying here? Are there any questions about this approach? Okay. The next slides are a little more complicated and try to depict what the system might look like over time as it's built up. Imagine that this is the current scope of all U.S. existing MPAs that are out there.

In this example the different colors represent different conservation objectives. Blue is diversity hot spots. Green are shipwrecks and other submerged manmade artifacts. Red are rockfish or particular commercial species that's being protected.

How do we get from all of these sites over to this system of MPAs using the input that you would be providing? The first thing we talked about would be these conservation objectives. For any particular phase you would have a conservation objective or two. Suppose that this one is the blue conservation objective for biodiversity hotspots.

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We would look at all of those existing sites that are out there that meet that objective that contribute to it. We have gathered all of these blue sites so we would look at those existing sites relative to that conservation objective and select the ones for nomination that contribute to that objective.

The next thing we talked about were these management criteria. Imagine that the different patterns inside the shape, whether it's solid or stripe, represent the varying levels of meeting a set of management criteria where the bland-colored shapes don't meet criteria but the more complex in the management approach have some pattern inside them.

And our entry criteria are going to select out some of those sites and in this case they are going to select out the ones that don't meet all the criteria that we have specified for the system. Those would go off to the side and we would be left with these other sites that are down here all contributing to this objective and all meeting these criteria that are there.

Imagine that the different shapes represent some level of protect that those sites offer to the resources that are inside them. The categories would then be used to bin those various sites so that we can tell a story about what we are accomplishing relative to that objective,

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1 relative to the different sites that would be part of the 2 system. This is really how we would envision using these 3 kinds of mechanisms that we are asking for input on. 4 I just want to recall that this is with the 5 entry criteria scenario. Remember we talked about these 6 could be used as entry criteria or assessment criteria 7 for sites that are in the system. Are there any questions on this before I move on? 8 DR. BROMLEY: I think it's marvelous that you 9 10 talk to us like 6th graders which is probably the level 11 which we can all grasp it. 12 MR. KELSEY: I'm not being condescending. really had to work together to be able to understand this 13 ourselves and be able --14 15 DR. BROMLEY: That was a compliment. 16 MR. KELSEY: This is with the entry criteria. 17 You can imagine what this would look like if we didn't 18 have entry criteria but we used those criteria as a way 19 to assess sites. We would look at it the same way as the 20 conservation objectives, focus on the blue sites. Those 21 would all come out. Instead of calling out any sites that 22 didn't meet a set of criteria, we would not do so and all 23 of those would go in following the categories that are built up. 24

So even though sites that may not in the perfect

	world meet all the management criteria that we want the
2	system to have in the end would be allowed in the system.
3	Then we would have these assessment criteria over here
4	that could be used to evaluate or assess those MPAs that
5	were in the system and could be used to provide assistance
6	to improve them and improve the sites in the system as
7	a whole as it grows and develops over time.
8	It's a slightly different approach.
9	Instead of screening out sites based on not meeting criteria,
10	it would be bringing them in and using the system to boost
11	their effectiveness or their improvement of the site by
12	providing support to them and working within the context
13	of the system.
14	DR. CRUICKSHANK: I'm a fourth grader. Can you
15	give me an example of what the shapes mean?
16	MR. KELSEY: For example, you could say these
17	down here are no taking reserves. Then these here could
18	be some kind of cultural heritage preserve. These could
19	be multiple use areas. These could be recreational use
20	areas. It will depend on the categories that are developed
21	in the committee as to what these are.
22	There are different models for what those
23	categories can be. NLPA uses one type of model for them.
24	IUCN has another set of categories. I think the task
25	here is to look at what would really benefit and be most

useful for the system recognizing we have all of these different sites out there to be able to tell the story simply.

CHAIRMAN HIXON: Max and then Dave.

MR. PETERSON: This has been very helpful, Jonathan. I see a little bit of a chicken and the egg question, though, if most of these are now managed by the states. If I'm sitting out there State X, I'm not necessarily going to be rushing to enter an area into this national system unless I have some idea of what are the benefits and what are the dangers of being part of the system.

The minute you take federal money, for example, you are subject to a whole host of new rules and some that you may not like. I see in your write-up that you are sort of assuming you are going to have to filter them out. You are going to have a herd of them there and the system is going to be too big. I think the reverse may be true. You may not have very many nominated at all unless we can deal with the question of what do you offer? What does becoming part of the system really mean?

MR. KELSEY: I think the approach here is designed to be able to provide some more certainty that we can provide benefits to these sites by starting small and growing over time.

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1	MR. PETERSON: But you might have zero unless
2	you are able to
3	MR. KELSEY: By starting small so that we can
4	grow over time and some of that is the difference a little
5	bit between this model and the next model which is this
6	would require a site to do a lot of improvement maybe before
7	they were to get in the system. If they use an assessment
8	criteria, those could be the benefits that could be offered
9	from the system. It could help develop management plans
-0	or monitoring programs or whatever it may be.
.1	Just to reiterate again, the idea here is that
.2	if we have some mechanisms that allow us to stay within
_3	the capacity of the system to operate or definitively say
L4	that there will be some benefits we can provide for the
L5	system.
-6	MR. PETERSON: Is somebody working on if this
_7	reaches a point where somebody is going to launch this
-8	thing, is somebody working on maybe Joe is what are
L9	the benefits? Why would I want to be part of this?
20	
21	MR. KELSEY: We are asking the previous
22	subcommittee, who is on hiatus now, to look at benefits.
23	You can talk about that, Tony, if you want.
24	CHAIRMAN HIXON: Our standing subcommittees
25	have the charge of looking at incentives so we are just

setting that aside for this meeting to get that input for the final framework.

I think Steve Murray was next. Oh, I'm sorry.

MR. URAVITCH: In some ways that's a parallel track and we are certainly continuing to look at that but we are trying to separate out that which is a whole other next of thorny issues we have to deal with from this. We are trying to clarify this set of processes but running along in parallel with this is every effort we can make to get the resources we need to put some value on being a participant.

MR. KELSEY: And there is interest in NOAA and DOI in thinking ahead to that initiation of the system and the types of support or benefits that could be offered fromboth inside the agencies and externally. That thinking is starting.

CHAIRMAN HIXON: Tony, you were right after Max.

DR. CHATWIN: Thank you. You covered what I was going to say. I would just add that also starting small the initial entrance to the system might not be as hungry for incentives. They might see them already so they would be willing participants in the system and that would help because you have limited resources and limited ability to give incentives. Willing participation might be key.

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CHAIRMAN HIXON: Incentives are definitely use issues.

Dr. Murray.

DR. MURRAY: First, I think that cartoon you have up there now I think is consistent with what the recommendations of this group have been which is to take your handle on the left which has everything in it and reduce it down using some criteria to a smaller set. I think we've been saying that for some time and I think that was something that was missing in the draft framework quidelines before the set of comments came in.

I want to raise another issue, though, and that is that we are struggling with trying to find categories or types of MPAs. I think that's the challenge to come up with some list for one of the subcommittees here. Your cartoon has each of those MPAs identified as being one type or another and ultimately going through some filtering system.

In fact, in practice most MPAs are going to have multiple goals. I think that when we wrote the initial report as a group that we attempted to identify what would be goals that would be there for MPAs. We refer to them as natural heritage goals. We refer to them as Cultural Heritage and Sustainable Production.

When the draft framework guidelines came out,

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I think we had some feedback from the committee about that.

Now I think where we are is we are trying to come back and identify several categories of MPAs which may be difficult given the fact that we have MPAs that may be designed to achieve multiple goals.

I come back to the system in California where I've had a good bit of experience. In California all of the MPAs were put into one of three categories. They were put into either a state marine reserve, a state marine park, or a state marine conservation area. The criterion used to sort an MPA into one of those categories was simply whether or not there was recreational and/or commercial fishing taking place.

The result of that was that a state marine park would allow no commercial fishing but some recreational fishing could be allowed. In California there are hardly any MPAs that fall into that category because in almost every place there is along the California coast some form of commercial fishing and there are very, very few places where it was decided that only recreational fishing would be allowed.

The number of MPAs that fall into that category are very, very few. On the other hand, the number of MPAs that fell into the state marine conservation area category,

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a category that would be dictated if there was any commercial fishing of any sort allowed from kelp harvesting to squid to whatever. That category was huge.

In fact, that category had areas that were very well protected in it, allowed nothing except for maybe salmon trawling in the surface waters but it would be a marine conservation area because of that, two areas that were very well protected -- I'm sorry, very little protected where there were a whole bunch of different kinds of commercial activities.

In evaluating those MPAs and what they would do or not do, the science group split that category up into levels of protection from high to mid to low and divided the marine conservation areas into other categories.

So if we are going to look at a task here where we're going to try to take an MPA and label it and have the diversity of labels from five to six when most of those MPAs are going to have more than one goal we are going to have a little bit of a problem, I think. I think this comes back to the issue of having goals identified which might be considered to be rows, and then having MPA types which might be considered columns and then having Xs in those with regard to each is supposed to achieve.

Now, there may well be a primary goal for each MPA but if there's a primary goal, then what about the

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1	other goals and how do they get evaluated? How does a
2	primary goal get evaluated? How does overall MPA success
3	occur?
4	I just want to raise that issue because I think
5	it's going to be one that we struggled with you struggle
6	with as you have gone through taking our report, translating
7	it in the draft framework guidelines, and getting where
8	you are now and it's going to be one that our subcommittee
9	is going to struggle with when we get our assignment.
10	CHAIRMAN HIXON: You just laid out the work plan
11	for Ad Hoc Subcommittee A very nicely.
12	VICE CHAIR ZALES: One quick question. Your
13	alls definitions of recreational and commercial fishing,
14	does that also include recreational and commercial diving
15	or is that separate?
16	DR. MURRAY: Any kind of commercial take that
17	is regulated by the Department of Fish and Game would fall
18	under the auspices of commercial and, therefore, would
19	be then categorizable if that was an MPA into a state marine
20	conservation area.
21	If you look at the California plan you are going
22	to see that there are lots of state marine conservation
23	areas, hardly any parks, and then several marine reserves
24	which would be the complete no take designation.
25	CHAIRMAN HIXON: Okay. We have Bob Bendick next

and then Tony.

MR. BENDICK: This is, I think, maybe implied by what Jonathan has said but not stated. I have read some of the other comments in addition to ours like those of the Coastal States Organization. A good deal of the criticism, if you call it that, constructive criticism of the draft that was issued with the framework was that it was more of an inventory than a mechanism for driving the positive creation of a representative system of national Marine Protected Areas.

I shouldn't say national. Of Marine Protected Areas. I think what we are trying to do here, that split pervades what we are trying to do here. The committee's original conception in its report was something that encouraged the creation of a representative system recognizing the different purposes of that system. That wasn't exactly the result in the framework.

I think what we are trying to do here is to figure out how, in a way, get back to our original approach which is to create a mechanism for encourages a representative system recognizing there are a number of goals and purposes of that system and not have simply an inventory. I think that is suggested by the committees and the approach that we're taking. Is that a correct assessment of what we are trying to do here?

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1	MR. KELSEY: That is what we are trying to
2	accomplish and I think what you're seeing here is trying
3	to break it down in a way that is doable, is achievable,
4	and can be accomplished over time in some steps that, again,
5	are achievable within the capacity of the system and the
6	partners that would be part of the system to make those
7	to accomplish those goals and objectives that are set
8	out.
9	MR. BENDICK: But there's a fork in the road
10	here. Either we're doing an inventory which has one set
11	of ways of doing it and results, or we are trying to create
12	a system that encourages the creation of the national system
13	and they are not the same thing. We may need to make a
14	conscious decision of which path we're on.
15	MR. KELSEY: Our goal is to build a system, not
16	to create an inventory.
17	MR. BENDICK: Okay.
18	MR. KELSEY: That's what is called for in the
19	executive order and that is the charge that we are setting
20	out to try to meet.
21	CHAIRMAN HIXON: Thanks, Bob.
22	Tundi.
23	DR. AGARDY: Tundi Agardy. Following on what
24	Steven said, I think the category of the discussion could
25	be complicated and possibly distracting to the ultimate

goal of trying to develop a representative system only because it's complicated and because the world community right now is struggling with this very question.

You mentioned IUCN, Jonathan, and IUCN is having a very high-scale category submit to discuss particularly this problem of what do you do with MPAs that have elements of all different kinds of categories in them and how do you overcome that? How do you overcome that in a way that is user friendly for the general public so that they can understand the scope of protected areas out there?

Of course, the category submit is going to look at protected areas across the board, terrestrial land marine. That submit is going to be happening in the fall and it might behoove the committee to actually track that discussion and the results of that submit and not get too bogged down in trying to develop a specific category system for the U.S.

However, there is a question of categories so that you can articulate what is in the system. There is also the question of trying to get a scope of is the national system actually being representative. There is representation across habitat plates or ecosystems. There is representation across kinds of protected areas relating to their primary goal or whatever.

There is also, I think, representation according

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to size and kind of management type in the sense of what the lay is always talking about, not letting the small scale community-based protected areas fall off the radar screen just because we are trying to identify those MPAs that really stand out at the national level.

I think we have to think not only about categories that make sense in terms of the story you're trying to tell but also categories that make sense in terms of the U.S. being able to evaluate whether a system is truly representative across all those kinds of representations.

CHAIRMAN HIXON: What you brought up, Tundi, as I see it, and I understand what the MPA Center wants, is really what all three, or whatever number of ad hoc subcommittees there are, are going to address all those things. I see the categories themselves as I understand it, and correct me if I'm wrong Jonathan, as being very broad stroke general categories, a half a dozen or so.

There's a couple strawmen that are included in the packet. In and of their names don't tell the full story at all but allow the public or anyone who is not deeply familiar with the system of, "Oh, this is that kind of MPA." Certainly any given site could have more than one of those labels.

It's in the management criteria and the selection

criteria where the rubber really hits the road and we get into all the subtleties of everything from community-based small MPAs to large-scale federal MPAs. That is the dichotomy I see. I personally don't have a big trouble with narrowing down the number of categories to six or something just for broad descriptive purposes.

Dave Benton.

MR. BENTON: Thanks, Mark. Just to follow up on that and thinking about the two models that Jonathan put up there, I think you hit the nail on the head because irrespective of the categories I could care less if there are ten or four, you know, really when you get right down to it. What it comes down to is the throttle is what we're calling management criteria, i.e., are you in or are you out.

The difference that I'm picking up between the two models, and I would be interested in some feedback on this, is this model that's up on the screen right at the moment has the criteria, the management criteria of being maybe a fairly narrow throttle and a more difficult road for entry or placement in the national system.

That is an up-front decision that would be made primarily, I would assume, by the MPA Center. Versus the other model on the other screen which is entry or placement in the national system is perhaps a lower threshold but

the result would be on that other end where it says MPA assessment criteria. I'm assuming the process there is assessment and sort of building an improvement over time.

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And the sort of the tension that I see between those two is, one, the MPA Center making the decisions more about who gets to be in or who gets to be out as opposed to some of the things that we were talking about of having jurisdictions that have MPAs nominate them because they want to be in there versus setting it up so they could get in and then you work with them over time to shape that national system. There is a tension there and we need to come up with, I think, some kind of balance because I would hate to see us come up with something using the narrow throttle that prevented folks from getting involved in a national system or having sites placed in that national system simply because the MPA Center the criteria just didn't appeal to them when they may want to be in there simply because recognition, first off, is important and, second off, the opportunity over time of doing certain things, whatever it is.

Improve scientific research, better enforcement capability, whatever it might turn out to be, that that opportunity for future improvements is lost. See where I'm going? There's a real tension between those two

1	opportunities that we need to thread the needle. I am
2	very sympathetic of where the center is and how that goes.
3	
4	MR. KELSEY: Yeah. I mean, this is that tension
5	between being overly inclusive so you have this big massive
6	system that you try to fix through time starting out small
7	and working up. That is going to continue.
8	MR. BENTON: One follow-up if I might just very
9	quickly. The other thing that we talked about, and it's
10	maybe getting lost here, is regionalization, looking at
11	this in some ways on a regional basis which in some ways
12	I think helps, or could potentially help, with the perception
13	of the system is too big, it's unwieldy.
14	That is true if you look at it maybe from 30,000
15	feet but when you get down to about 5,000 feet on a regional
16	basis, maybe that's less of a concern. That is something
17	else I think we need to be thinking about because there
18	may only be four or five MPA. Depending on how those criteria
19	go maybe there's none or maybe they are all in there versus
20	somewhere off of the Atlantic coast which could have hundreds
21	and that might be a different issue.
22	CHAIRMAN HIXON: Tony Chatwin.
23	DR. CHATWIN: Thank you, Mark, and thank you,
24	Jonathan. It's more for clarification because as we discuss
25	this issue around the table it's becoming less clear to

1	me in that management criteria I understood where one of
2	the consideration for entering into the system, not the
3	consideration for entering into the system. Is that
4	correct? They are being used interchangeably and we need
5	to be very clear about that.
6	MR. KELSEY: Maybe I could just clarify. To
7	be in this pot here is saying it meets those initial set
8	of criteria like the definition of marine, the definition
9	of area reserved, those existing criteria that are already
10	in the system and that are already in the framework and
11	defined that you all provided input on lasting.
12	We have some comments on lasting we have to
13	grab hold of as well. Those would be the first set of
14	criteria. Do they just meet those five criteria about
15	the definition of MPA that we're establishing. The second
16	set of criteria are really here so there's two sets of
17	criteria.
18	MR. URAVITCH: You actually have conservation
19	objectives which is the priorities. What is the highest
20	priority conservation objective.
21	DR. CHATWIN: So this box on the left is so
22	there's going to be an inventory of Marine Protected Areas
23	and then a national system of protected areas.
24	MR. KELSEY: I don't believe there will be an

inventory of Marine Protected Areas but for illustration

purposes we are saying this is the suite of suites out there that would meet those definitions of MPA that we've specified in the framework, lasting, marine environment, area reserved, and protection. And then to get into the system they would be -- you would apply the objectives for implementing the system over time and then you would apply the criteria if you have criteria to filter out those which weren't meeting a certain level of management specification that was thought to be appropriate for being part of the system.

DR. CHATWIN: But that is where we need to be very clear because representation, as we've heard around the table, should be an entry criteria which is different to management criteria.

CHAIRMAN HIXON: Can I help clarify this? I've been reading through these documents from the MPA Center that the management criteria, a little bit in my mind, is sort of a misnomer. I see it as a list of -- as a prioritized list of, first, criteria that must be met to enter the national system. Those are entry criteria, nonnegotiable. You must have this, this, this, and this to enter the national system whatever it is.

Then once it's in the system there's going to be priorities for subsequent -- I don't know how I worded that in your document but sort of subsequent help with

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1 that MPA, or set of MPAs, as resources become available. 2 What are desired characteristics of MPAs once they meet the minimum criteria for entering the national system? 3 4 This is where I see the Subcommittee B doing 5 its work is basically listing what is it that we want to 6 see in MPAs? What are the criteria that we want to see? 7 Of those criteria what is the minimum subset to get into the national system? Then once it's in what are the 8 prioritized things that we want to help those MPAs have 9 10 that will benefit the national system and the overall goals 11 of that system? Is that correct? 12 Maybe management criteria is a MR. KELSEY: misnomer and too restrictive. Whatever these criteria 13 14 are, that's what we are asking for advice on right here. 15 Representative wouldn't necessarily be off the list if 16 that was a criteria that the FAC felt strongly about and 17 wanted to put forward. If that is too limiting of a term, management criteria, then it is but it shouldn't be 18 19 considered to be limited to those things. These, again, 20 are for illustration, for examples. The scope and the 21 actual outcomes are going to be determined by you all over 22 the next three days. 23 CHAIRMAN HIXON: Go ahead, Tony. 24 DR. CHATWIN: I understand we haven't gotten

into details but this is an important detail.

see -- I think the terms to define the ad hoc subcommittees,
I mean, representation doesn't fit anywhere. Under Natural
Heritage we have representative habitats but then under
Subcommittee B, management criteria, that doesn't
necessarily have sort of representation that is being
mentioned, the different type.

CHAIRMAN HIXON: So one criterion could be does this MPA address the goal of a representative system of habitats? Yesorno? If it does, that 's an entry criterion. If it's not, it's not in. The exact wording of what we are naming these subcommittees and what we are calling these management criteria or whatever isn't as important as the content.

MR. KELSEY: I think it's also important -CHAIRMAN HIXON: Your issues are important and
I want those to get in there and they will get in there
with your leadership.

MR. KELSEY: I think that is also important just to remember that, again, no one of these mechanisms is a silver bullet. The management criteria, or whatever these criteria should be, shouldn't also be the categories and the objectives so that's is where we have to be thinking about the products of these subcommittees and coming back to the table and talking about what are being developed and thinking about that.

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1 Maybe representative fits better under 2 objectives for looking at sites than it does under entry I'm not saying that is necessarily the case 3 4 but those are the discussions that need to happen as the 5 subcommittees meet, talk about the charge, and then come 6 back to the full committee to report. 7 CHAIRMAN HIXON: Okay, Tony? DR. CHATWIN: Okay. 8 CHAIRMAN HIXON: For now? Okay. Ellen, then 9 10 Wally, then Dennis, then Dave, and then Dan. MS. GOETHEL: Ellen Goethel. I'll go back to 11 12 what Dave Benton was talking about. I really think that he has an all-inclusive view and I would take the opposite 13 where we really do need to be very specific at the very 14 15 beginning on what does get into the initial pie. 16 I do believe to help the MPAs that may want 17 to be in and don't need the criteria that we come up with, we should obviously give them a list of criteria that they 18 19 need to meet to bring their MPA up to the level that will 20 make the criteria. That way we don't have MPAs that are 21 really not useful ending up in the system just because the people who are governing them really want them in there. 22 23 We want to have a set that are really, really good. If you have some -- I just feel like if you've 24

got some that you have to bring up to the level of the

	rest, it is not going to be it won't be neighbor to the
2	general public. I think in the end when the rubber hits
3	the road you may have problems in the public area if you've
4	got a lot of MPAs that they don't see as being really useful
5	and that we have to put money into to make them come up
6	to standard.
7	CHAIRMAN HIXON: These are all important issues.
8	What is actually happening is you guys are starting to
9	do the subcommittee work so as soon as we can get through
10	these general discussions, we can actually get down to
11	work.
12	Okay, Wally.
13	MR. PEREYA: Yes. I see it's five after 12:00
14	so I'll try to be brief which is difficult sometimes.
15	CHAIRMAN HIXON: Thank you.
16	MR. PEREYA: We have a situation where we have
17	a charge and that is the national system MPA, but there
18	is specific language in the presidential decree that says
19	that this will all be done within existing authority.
20	There will be no new authorities created so that in itself
21	creates a conundrum as to how you work around this.
22	Since there's a voluntary element that is built
23	into this, it seems to me it's very, very important that
24	the benefits that one derives from I'm putting whatever
25	entity is the authority over an MPA has in putting that

into the national system however we define how you get in. The benefits have to far outweigh cost, real or perceived.

As an example, in the State of Washington we have a state system of registered drivers. As an individual there are certain criteria that I have to meet in order to join and be part of that state system of registered drivers. One of them is you have to be at least 16 years of age and I think under 100 or something of that nature.

If you fall into that category, you show proficiency in driving, you pass some sort of a written test that says you know the difference between a red light and a green light and so forth, and you then can become part of this system. Well, there are certain advantages of belonging to this system. I get an identification card that I can then use to get on an airplane.

That works pretty good. I don't have to have a passport with me. If I get stopped, it shows I am a registered driver and I'll be able to continue to drive.

One of the disadvantages is if you don't have that card and you get stopped, you know, severe finds and so forth.

There is built intuit sort of benefits that are derived.

In this case here we all know that federal dollars are very limited and you have entities which have MPAs

presently, the Regional Fishery Management Councils together with the National Fishery Service have got systems of MPAs associated with their management structures that they manage for better or for worse. They also have a lot of other activities that require funds. These MPAs require funds.

We in the North Pacific have fishery surveys which are very critical to the management process. If there is an MPA system that is established, obviously it's going to take money to manage and enhance that national system.

Individuals are going to be looking at that and saying, "What benefits do I get by putting my MPA into that system vis-a-vis the reallocation of scare federal money in my particular entity that will take place as a result of this? Is this going to be worthwhile to me?"

I think for that reason the benefits to be derived from this national system really have to be clearly laid out and made apparent so that there will be participation.

CHAIRMAN HIXON: So this is back to the issue of incentives that is one of our standing subcommittee topics and an extremely important topic. It's also not the topic we are going to deal with at this particular meeting.

Okay. We are really running out of time. I'm

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1	not taking anymore names at this point. There are four
2	more people in the queue. Dennis Heinemann. Please be
3	brief, everyone.
4	DR. HEINEMANN: I'll start with a question,
5	Jonathan. I may have missed it. Is there something in
6	there on performance of an MPA as to whether or not that
7	would affect his entry into the system or not?
8	MR. KELSEY: No.
9	DR. HEINEMANN: I think then there is something
10	missing here potentially.
11	MR. KELSEY: Unless you consider I mean, it
12	depends on how you define performance. If they should
13	have a management plan and they don't, you could call that
14	performance. But there are also other ways to measure
15	performance. There is a whole slew of ways. When you
16	are saying performance that is extremely broad.
17	
18	DR. HEINEMANN: Performance with respect to
19	things or other ways of looking at objectives such as
20	protecting biodiversity or enhancing sustainable
21	production, something like that. I'm assuming that
22	ultimately we want a system of MPAs that is functional
23	from an ecological, economic, and social perspective.
24	Therefore, it seems to me that at some stage in this
25	scheme you need to take into account what we know about

the performance of MPAs in assessing their entry into the
system or alternatively what level of assistance they give
as part of the system.

It is all well and good to set up a series of criteria, objectives, categories, assess management, etc., but if the MPAs don't actually performance to contribute to a functional valuable system of MPAs that meets those Natural Heritage, etc., goals, then what is the point of having that MPA? It's like saying you have an objective or protecting the coral reefs but you set up an MPA and there are no coral reefs.

CHAIRMAN HIXON: That is where the issue of monitoring and assessment is extremely important and should be part of the deliberations of the subcommittee.

MR. KELSEY: At that level that you just exampled putting an area that says it's going to manage coral reefs but there's no coral reefs there, that doesn't contribute to that conservation objective. But is there anywhere in here that would say if you are a coral reef MPA and you have coral reefs in your area how well are you doing relative to that? That could be built into the entry criteria.

It's not is it up there now or isn't it. It's this is an example and we are looking for the advice from you all on what these criteria should be and

1	what the objectives should be. If a committee comes forward
2	with something that says, "We need to evaluate the
3	performance ala how is my MPA doing guidebook for these
4	kinds of things?" then that is something we'll need to
5	give some serious consideration to. There's nothing
6	specified up here right now. These are the discussions
7	for the subcommittees to have and for the full committee
8	to have.
9	CHAIRMAN HIXON: All good points.
10	Dave Benton.
11	MR. BENTON: I have a really simple question,
12	I think. I'm on Subcommittee A where we look at the
13	categories and yet the entry criteria are going to be dealt
14	with by Subcommittee B or whatever. I'm just wondering
15	if we should on our subcommittee give some thought to criteria
16	for entering the categories we are coming up with because
17	there's a little bit of disconnect there.
18	CHAIRMAN HIXON: There is integration among the
19	products and work of all these subcommittees. The problem
20	is trying to do work in plenary is impossible.
21	MR. BENTON: I understand.
22	CHAIRMAN HIXON: What we're doing is we are going
23	to be subdividing. My hope is that some subcommittees
24	will get their work done earlier than others and then join
25	others and there will be that cross-fertilization.

1	In any case, we will be reporting back
2	periodically on our subcommittee work and discussing it
3	in plenary and ultimately with the final products voting
4	on those final products at the end of the meeting. We'll
5	have as much cross-fertilization as we can within the
6	confined of a subcommittee structure.
7	MR. BENTON: My difficulty is I don't know how
8	to come up with a category unless I know what the criteria
9	are for getting into it in a way.
-0	CHAIRMAN HIXON: I understand. This is why the
.1	MPA Center provided the background and guidance materials
.2	as well as the strawmen tables to give you some ideas to
_3	get started. Everybody definitely needs to check that
L4	stuff out.
L5	Dan Bromley.
-6	DR. BROMLEY: Mr. Chairman, out of infinite
_7	empathy, not sympathy but empathy for you watching the
-8	clock and seeing a bunch of people with both dubious comments
_9	and questions, I withdraw my name from your list.
20	CHAIRMAN HIXON: That was perfect, Dan, except
21	you called me Mr. Chairman.
22	DR. BROMLEY: Whatever you are.
23	CHAIRMAN HIXON: I'll forgive you this once.
24	MR. BENTON: Yeah, right. Okay. Take me off
25	the list.

CHAIRMAN HIXON: Last question. Bob Zales.

VICE CHAIR ZALES: I just want to be clear in my understanding of this since I'm the chairman of B. I'm looking at this with MPAs like, and I'm going to use the analogy of a boat. We're going to figure out what the basic components for this boat are going to have to be and some of these MPAs are going to meet that basic thing so they will be like in the top five category.

The other ten some of them are going to have various parts of the component and then we are going to recommend these others can or can't be in here but, if they are, or they want to be, then the MPA Center is then going to help provide these components to bring them to the level of those other five boats. Is that a reasonable analogy of where we are headed?

MR. KELSEY: Ithink that is a reasonable analogy.

CHAIRMAN HIXON: Okay. Here's our charge. In your packet is a number of documents -- are a number of documents that are important for your subcommittee work. The first one is our revised charge. That revised charge for this particular meeting is basically what Jonathan just spoke about and we just discussed.

I want to emphasize that all the ideas that were put forth are important ideas and they can all be incorporated under this subcommittee structure. Make your

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stuff fit. There's no preconceived notions about what you have to say or not say.

For each subcommittee, and I assume everybody has the list of those ad hoc subcommittees so you know which one you're on, these adhoc subcommittees were designed as much as possible to even out the level of expertise, to level out the representation of different stakeholder groups, as well as to be chaired by members of the executive committee who were involved in the development of all this.

That said, there were a number of last minute cancellations by members and some of these ad hoc subcommittees have shrunk in size so we are going to have to do some merging. In particular, John Ogdem is not here. Who else is missing? Dan Suman is not going to show up until tomorrow. Dennis Heinemann is only available today. Things of this sort. Bob Bendick was originally in Subcommittee A and he's been returned to Subcommittee A. Those are the changes.

We are going to have Subcommittee A, which is development this broad list of categories for descriptive purposes, which now has a membership of four, and is chaired by Steve Murray, meet with Ad Hoc Subcommittee 2 which is developing priority objectives for Cultural Heritage which only has two members in it chaired by Ellen at this

time. You guys will be working together, decide which business you want to do first. Either Ellen will chair first and then Steve will chair or vice versa. You guys can work that out.

Ad Hoc Subcommittee B, this whole management criteria, the one that we've been having a lot of discussion about, you can change the name of that if you want. All these subcommittees have fairly extensive packet material involving guidelines and background and, importantly, strawmen that the MPA center has put together.

You can use these strawmen or not but this is what the type of tabular list of materials that would be useful to the MPA Center. Go through these materials carefully. That Ad Hoc Subcommittee B is chaired by Bob Zales. It's the largest so it will meet alone.

Finally, Subcommittees C1 and C3, the priority objectives for Natural Heritage and sustainable production

-- I may have said that wrong before. Cultural Heritage is Ellen's group. Natural Heritage and Sustainable Production. Natural Heritage chaired by Tony Chatwin and Sustainable Production chaired by Max Peterson will also meet together with the same idea of doing one subcommittee's work first and then the other subcommittee's work. We will be divided into three groups, a group of five, a group of six, and a group of seven.

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130 That said, and looking at the clock and how we are way behind time, what I would like everyone to do at this time is grab your lunch, meet where I tell you to meet, which I'm going to tell you about in a moment, and just work through lunch and we will reconvene -- we are going to reconvene at 2:30. I would like you to work for the next two hours in your subcommittees to get as much done as you can. We'll reconvene in plenary at 2:30 to see how far we've gotten and see what's developed. Here's where we're meeting. There's another room we have available, room 515, which is right out here somewhere right over in this corner. That's where we're going to send the largest group which is group C1 and C3

combined, the group of seven. They are going to meet in room 515.

Subcommittee A and C2 will meet at this end of the table. A and C2 at this end of the table. Subcommittee B will meet at that end of this table. Please right now break, get your materials, grab your lunch, go sit down with your committee and start working. Thank you, everyone.

(Whereupon, at 12:19 p.m. off the record for lunch to reconvene at 2:30 p.m.)

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The combined group A and C2. Subcommittee A. Did you

A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

thanks everybody for grinding away at these tasks initially

and making clearly some progress. I've heard that all

each subcommittee. Time-wise we've got about maybe 10

minutes each. Then at 4:15 is the scheduled public comment

period. If there is no public comment, and no one has

signed up yet, it shows you the interest in our group,

then we'll just continue. We'll go back into session and

then break at 5:00 as originally planned.

three groups did make some progress.

CHAIRMAN HIXON: I think we're all here. First,

What I want to do now is to hear briefly from

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3:36 p.m.

All righty. Let's just go down the letters.

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1	guy get to Subcommittee A work?
2	DR. MURRAY: We did.
3	CHAIRMAN HIXON: Do you have something you car
4	report, a progress report?
5	DR.MURRAY: Well, let's see. Where's Jonathan?
6	CHAIRMAN HIXON: Ten minutes.
7	DR. MURRAY: Where's Jonathan? Let's do C2
8	first.
9	CHAIRMAN HIXON: Okay. We're going to do C2
10	first.
11	MS. GOETHEL: We worked on A1 first and I think
12	it was really helpful to have the large group together
13	for that because we had some really varied ideas. Then
14	we split up at the very end into subgroups.
15	CHAIRMAN HIXON: This is the progress report
16	for group C2?
17	MS. GOETHEL: C2.
18	CHAIRMAN HIXON: Just give the name of your group
19	if you don't mind.
20	MS. GOETHEL: Cultural Heritage. Objectives
21	for Cultural Heritage. To be honest with you, we had a
22	very short time. All we got to was prioritizing the
23	objectives and rewriting a few of the objectives. Jonathar
24	is going to print those out for us and then we have homework.
25	CHAIRMAN HIXON: Okay. Can you just read the

1	list that you have so far?
2	MS. GOETHEL: Sure. We prioritized. No. 1
3	would be cultural and historic resources listed on the
4	NRHP. The second one would be cultural and historic

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Four would be cultural and historic sites that may be threatened. Five are cultural and historic sites that can be utilized for heritage tourism. We are probably going to rewrite that title but you get the idea. 6, cultural and historic sites that are under-represented. The last one was cultural and historic sites where additional information can be relatively easily obtained to assist in determining NRHP eligibility. That's as far as we got.

resources formerly determined eligible for the NRHP or

listed on a state register. Three are cultural sites that

are paramount to a culture's identity and/or survival.

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MR.O'HALLORAN: Can I ask a question? Was there discussion about cultural as it relates to traditional uses?

CHAIRMAN HIXON: Great.

21 22

23

24

MR.O'HALLORAN: Okay. Ithinkthatissomething that we discussed in the past in earlier sections that cultural would include more of the traditional uses.

MS. GOETHEL: We hadn't gotten into it yet.

25

Thanks.

CHAIRMAN HIXON: Let's go on. Steve, could you give us a summary?

DR. MURRAY: We are now ready. Jonathan has passed out a printout that is the results of Subcommittee A's work so you should have that in front of you. It's up on the screen as well.

Our combined charge, and we spent our time working on this, our charge was to look at the categories of MPAs and to try to come forward with a set of categories for classifying any MPA that might be out there into the national system. We were given a couple of alternative proposals, draft proposals. We discussed those and came up with one of our own as this group is always seemingly able to do.

You have that in front of you. Very briefly we have identified three over-arching categories of MPAs.

There are MPAs that are entitled Marine Natural Heritage Areas, Marine Sustainable Production Areas, and Marine Cultural Heritage -- that should be Areas. And under each there are two subcategories. You can see the titles of those. The first super category, Marine Natural Heritage Area, the primary conservation focus is Natural Heritage. It's important to note that is the primary, not sole, focus.

The primary management goals are listed. The

use category or level of protection is listed. The use category fall into two, multiple use and no take. This is consistent for each of the three major types of MPAs and the two subcategories, therefore, of MPAs that fall underneath each category title.

I think pretty well what you see here speaks for itself as our attempt to put this categorization scheme together. The idea is that the first category, which is multiple use, is going to involve the allowance of more than one use but that uses may be restricted or zoned and access may be limited in order to meet management goals.

Where as the no take type of category will have no extractive uses allowed except for permitted scientific uses and other uses may be restricted and access limited as necessary to meet site management goals.

The idea here is that a no take category is more restrictive, more protective, stronger with regard to the protection it provides. You'll see that type of additional stronger protection provided under each of the Marine Natural Heritage Sustainable Production Areas and Cultural Heritage Areas.

So this is our best attempt to come up with some kind of categorization scheme. With that I'll leave it open and try to answer any questions as anyone else in the group might want to. Ellen, you have your hand

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1	up. You may want to say a word or two as well.
2	MS. GOETHEL: I just wanted to emphasize that
3	under the use category where it says, "Limited as necessary
4	to meet the site management goals." Site management goals
5	would not necessarily be exactly the same as the primary
6	management goals. They would have a whole subset of
7	restrictions or uses that would be allowed for each site.
8	There's a little distinction there.
9	CHAIRMAN HIXON: So you're saying beyond the
10	primary conservation focus of the site the site management
11	goals could include something else basically.
12	MS. GOETHEL: They might allow management
13	goals here are very, very general. Over here where we
14	said, "Limited as necessary to meet site management goals,"
15	they are talking about two different things. Not totally
16	different but a subset within a set. Do you see what I'm
17	saying?
18	CHAIRMAN HIXON: What I'm hearing in my own brain
19	the way I work that out is there is going to be that primary
20	management goal.
21	MS. GOETHEL: Right.
22	CHAIRMAN HIXON: That's what puts it in that
23	category.
24	MS. GOETHEL: Absolutely.
25	CHAIRMAN HIXON: And there may be additional
1	1

goals as well.

MS. GOETHEL: Each site specifically has on its own.

DR. MURRAY: Mark, I think the issue here that we talked about, and correct me if I'm wrong the rest of you on the subcommittee, is that the primary management goals are fairly global as they should be in a categorization theme. Any individual site would have more specific types of goals against which evaluation might occur.

Then in a use category you might have some actions you would need to take in order to realize some of those more specific goals that may apply to a given site. This is language that hopefully captures all that kind of activity.

CHAIRMAN HIXON: Dan.

MR. BENTON: I'm sort of interested in the far-right column, Steve. I see a dichotomy in which in one sense it's of two different types, take and use. I'm sorry. That's not ordinarily the way I dichotomize things. It's either yes or no or lots of use or not very much use. Now you have use and take. I would really like this far right-hand category to speak both to us as a committee and to secretaries that we advise and to the public about what goes on here. I wonder if this no take word or phrase isn't a carryover from old discussions.

1	I find it not very pleasant but I wish there
2	was a way that you could help us think about I mean,
3	is this managed use? Is multiple use managed use? Then
4	this other box I don't know what it is but I must say I'm
5	uncomfortable with this dichotomy which isn't.
6	DR. MURRAY: You know, we had, I think, some
7	struggles with that which is one of the reasons why in
8	the model we represented that column was categorized as
9	level of protection.
10	MR. BENTON: Protection, yes.
11	DR. MURRAY: Multiple use is not a level of
12	protection per se because it's a grab bag with all different
13	use possibilities.
14	MR. BENTON: I can see lots of uses under no
15	take but no taking. You can boat across it. You can get
16	down in it but you can't take anything out of it.
17	DR. MURRAY: So can you offer a parallel set
18	because we were trying to come up also with what might
19	be different titles.
20	MR. BENTON: If you're open, I'll think about
21	it and others may. If you are committed to this, then
22	there's no sense in trying to improve upon it. If you
23	are really looking for some alternatives, let us put our
24	heads together on it. I don't find this quite satisfactory.
25	CHAIRMAN HIXON: We've got to move along because

we have to get everybody in. I'll take a really quick question.

Tony, you're next. Please make this very quick. We've got to stop at 4:15.

DR. CHATWIN: I like how this is coming along.

I just had a question. One scenario, the Marine Natural
Heritage Areas, you have the resource conservation areas
and the resource reserve. In the conservation areas we
can zone it so that within it you could have subsections
that would fit the criteria for the no take areas and the
resource reserve. Can you share with us discussions you
had about that and how that works?

DR. MURRAY: So your view is that you can take this area and call it a Marine Natural Resource Conservation Area but have part of it embedded in it where no take might be present as a zoned-off activity. I think the way this would be categorized would be it would be two types of MPAs, one embedded in another. The one MPA where some kind of multiple use in zoning was going on would be called the first type, but the second area where there would be no take would be called the second type.

That is exactly, by the way, how this went in California because in California there are side-by-side, in-shore and out-shore areas, some as no take and some that falls into the other category. You could look at

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1 that in an overall step back mode and say that's a zone 2 type of use but those areas have different names associated 3 with the kind of activities that they are controlling. 4 CHAIRMANHIXON: Okay. We have five more minutes 5 we can spend on this one. Out of respect for the letting 6 everybody get a quick say in, we are obviously going to 7 come back to all these issues. We've got three people lined up now, Bob Zales, Bob Bendick, and Dennis Heinemann. 8 VICE CHAIR ZALES: Mine is real quick. On the 9 10 Marine Cultural Heritage under the Primary Management and 11 Goals, you've got everything listed there and at the end 12 it says, "And recreational opportunities." Did you purposely exclude commercial opportunities or did they 13 not have any source level? 14 15 DR. MURRAY: For Cultural Heritage I don't think 16 that a primary management goal involves commercial 17 opportunities. It's a primary management goal. CHAIRMAN HIXON: Thank you. Bob Bendick. You 18 19 need to use a mic. 20 MR. BENDICK: Just a comment from the group. 21 I think we talked about the no take stuff. Perhaps the feeling was it's better to just say it than leave it to 22 people's imaginations. It is what it is. We have tried 23 to closely define what it is and people can like it or 24 25 not like it but they won't be confused by it.

1 CHAIRMAN HIXON: That's true. There is more 2 discussion that is going to need to take place here. 3 example, one can imagine dumping mining tailings into an 4 area as being no take because you are dumping stuff in. 5 I often hear the term "fully protected" in lieu of no 6 take. Anyway, further discussion on that? 7 All right. Dennis Heinemann is next. We have three minutes. 8 DR. HEINEMANN: Did you consider a category in 9 10 this -- this has something to do with the question Mark just asked -- a category that was even more restrictive 11 12 than no take in which no destructive activities are allowed thinking of things like cable laying, 13 14 high-intensity use by divers and snorkelers and that kind 15 of thing. 16 One of the reasons why it might be important 17 to consider that is there are some areas in which fishing doesn't occur and how would you provide that protection 18 19 because the no take wouldn't apply then necessarily? 20 DR. MURRAY: If you read the language, it says, 21 "Other uses may be restricted and access limited." That is going to appear in all of these. That would come in 22 23 to these other kinds of activities you're talking about which could range from anything from dumping mining tailings. 24 25 One of the types of activities we discussed was running

jet skis in and out and back and forth in an area where that kind of activity might be disruptive.

All those would fall under the use of other uses may be restricted. Those other uses that would be restricted, or may be restricted, would need to meet site management goals. I think we've got that covered but, you know, you might want a different type of terminology. I think the biggest issue really is the multiple use versus no take. Those are not parallel headings.

As Bob pointed out, we at least made an attempt to put one category in each of these types of areas into a more strong protection scenario. Obviously the multiple use category is going to have a whole range of different levels of protection so you can't into it what the level of protection is in a multiple use type of category of an MPA without knowing what the uses are and what's restricted and to categorize them accordingly.

At least with the no take you can intuit that this is a strong level of protection for Marine Natural Heritage, for Marine Sustainable Production, and for Marine Cultural Heritage. We thought that distinction was worth making. Hence, that's why it stayed.

CHAIRMAN HIXON: All good comments. Dave Benton, can you wait? Thanks.

Okay. I would like to go on to the next group.

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That would be Group B. This is the so-called Management Criteria Ad Hoc Subcommittee.

MS. WENZEL: I should say this group was comprised of Bob Zales was the chair, Tundi -- I don't have my list in front of me. Jeff Pearson, Dan, Mike Cruickshank, and Dan Suman will join us tomorrow. We had a couple of other folks from NOAA. Joe and Dana joined us also. So what we did was we looked at the list of management criteria that had been discussed. developed We some additional criteria that we thought were important and then we went through a process to talk about which ones we thought should be entry criteria and which ones should be used to evaluate technical assistance or needs. had quite a long discussion about the big tent versus the small tent in terms of how large the national system should be, how should it function. We recognize there was a lot of breadth on that issue across the committee.

Where we ended up was this proposal to look at tiers to identify some basic entry criteria and those are listed at the top there in terms of tier 3. Those would include clear goals and objectives, site specific legal authority, site specific management plans, and appropriate staff support. Those would have to be met in order for a site to enter the national system.

Then after that there are some additional

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1	criteria that sites could meet in order to move up to a
2	higher tier. Those would include monitoring and assessment
3	including benchmarks and indicators, enforcement capacity,
4	balanced stakeholder involvement through the process,
5	active outreach and education, and on-site staff.
6	You could put appropriate in front of each of
7	those. We talked about the fact that those would need
8	to be defined and they might be different in different
9	cases. The idea was that tier 2 would include at least
0	one of those five bullets and tier 3 would include all

of them.

Again, we recognize tier 1. I keep confusing them. I'm dyslexic with my tiers. We recognize that some of these tiers are very restrictive and that there would be very few sites that would meet them but we thought it was a good starting place in terms of talking about what was desired for our sites within the national system.

CHAIRMAN HIXON: Could you discuss the rationale for the system?

MS. WENZEL: Do you want to? Sure.

VICE CHAIR ZALES: What that was because obviously there's going to be -- the appearance of this is that you are going to have a crown at the top. There obviously must be some MPA somewhere that meets every bit of that. In a sense when it comes to being part of a national

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system, they don't really need anything.

If you're going to be involved in a national system and you are going to want the assistance of whatever benefit you're going to get from the national system, then at a minimum would be the bottom, tier 3, you would meet those four goals. Then if you were going to be in the middle part and try to achieve the middle part, then you would have to add one or the other.

Once you've got them all then you get to the crown level. Reality kind of says in our opinion anyway that the 1,500 or 1,600 that have been identified all aren't going to get into the system. Some of them aren't going to want in the system. The ones that do to get into it they reach that minimum amount and then the national system will assist them in trying to get to the top if they want to. Also realizing that there's probably some MPAs out there that can't meet all of this.

They may meet the first four and they may meet one or two of the others but they will never achieve them all because they are not designed to do that so there is no way they can get there but they can still be part of the system because they are doing what they were intended to do. That's kind of the rationale behind it.

PARTICIPANT: Are all those in and out factors?

MS. WENZEL: Just the top four.

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VICE CHAIR ZALES: The first four are the ones with the checks. That is the minimum criteria that you would need to get into a national system. Then to get to the second level would be those first four plus a minimum of one of the five dots. Once you achieved all four checks and all five dots you are at the top. You're done.

CHAIRMAN HIXON: Tony is next.

DR. CHATWIN: The concern I have is on behalf of Lelei because we've had this discussion in Subcommittee 2, the standing subcommittee.

VICE CHAIR ZALES: Tony pointed that out.

DR. CHATWIN: I mean, it doesn't seem like a community-based area that doesn't necessarily have site specific legal authority and a management plan. It's out of the national system and this is precisely what Lelei was concerned about and this is precisely what we have been working against as a committee which is we do not want to alienate a site because it has been set up for a different purpose than those.

I can see the federal sites fitting in nicely here and I don't know how many state sites would fit in but I think we need to be very careful with the sites like Lelei because those are important constituents for the national system. If you guys discussed it, it would be good if you could tell us what you discussed.

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1	VICE CHAIR ZALES: And we talked about that and
2	those concerns were expressed. When it comes to
3	and some of this is still kind of open-ended because
4	when it comes to a state we are, in my mind anyway, trying
5	to figure out why would a state even want to be involved
6	because obviously you're not going to force them so they
7	are going to gain something from it. If they can get past
8	some of that and this is all up for discussion for the
9	final two to get the info like you just did. Tundi talked
10	about what had been done there. That's pretty much where
11	that is.
12	CHAIRMAN HIXON: We've got two minutes and two
13	people are signed up. One minute each.
14	Dave Benton.
15	MR. BENTON: I don't know who should answer this
16	but if I understand it, an entity wants a site to be in
17	the national system. If they meet the first four checks
18	under entry criteria, they can qualify to be in the system.
19	Then it's a progression of sort of how you rank in the
20	system and whether or not you get added bennies under those
21	other two tiers. Is that the idea?
22	
23	VICE CHAIR ZALES: Once you get into the system
24	then you have the benefit, whatever the benefit is. To
25	my knowledge, we don't know what the benefit of the national

1	system is going to be yet. Once you get into the system
2	and once that benefit is defined, then that gives you the
3	opportunity to obtain that benefit.
4	I'm assuming that benefit, with something like
5	this anyway, you would have some alternate benefit to get
6	to the top. Otherwise there would be no reason to go for
7	the top. Like I said, there will some that can't even
8	make it to the top because they are just not designed to
9	do it.
10	MR.BENTON: Mr.Chairman, just a short follow-up.
11	The tier 2 and one are not intended to keep a site out.
12	VICE CHAIR ZALES: No, no. Once they get in
13	in other words, if you're not there, then obviously
14	you don't get any benefit from the national system. Once
15	you get on the bottom floor, then you seek assistance for
16	that benefit whatever it might be.
17	MR. BENTON: And this is all voluntary. Sort
18	of nominating and
19	VICE CHAIR ZALES: Because you have this now
20	you're in.
21	
22	MR. BENTON: Okay.
23	MR. O'HALLORAN: So I've got 10 seconds.
24	CHAIRMAN HIXON: We are virtually out of time.
25	Can you make this very quick?

MR. O'HALLORAN: Yes, I can. Just to carry on a little bit with what Tony said, I think some of that tier3 which we would consider minimum, a minimum requirement, the site specific management plans and the appropriate staff support I think would certainly eliminate most community-based MPAs and also eliminate many of the state regulated, state control, state jurisdiction MPAs.

It's just a comment. I think that if our intent is to get MPAs into the system with some reasonable criteria, I think those particular ones I think we might want to look at a little bit because I think we do want the state MPAs to participate in this.

VICE CHAIR ZALES: The term appropriate -- Joe and I had this conversation. It's kind of what is the definition of appropriate. I'm certain some attorney somewhere is going to define it. Appropriate could be, in other words, if a state -- if a local entity had something, clearly somebody had to establish the site. In my mind appropriate would be there is your staff support because they created it. Appropriate was put in there to try to be flexible.

MR. O'HALLORAN: In the limits of time, the 10 seconds that Mark gave me, I think we probably need to discuss that one or, at least, I would appreciate that.

CHAIRMAN HIXON: Absolutely. Again, this is

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1 just an initial 10-minute discussion by each subcommittee 2 and we are probably not going to have any input, any public comment so we'll just continue but right now I just want 3 4 to give each group 10 minutes just for a quickie overview. 5 The last group is the combined C1 and C3. Who wants to speak first, C1 or C3? C1? Okay. You are the 6 7 priority objectives for Natural Heritage. Okay. Go, Tony. DR. CHATWIN: All right. Very quickly, we did 8 start working on this. The first decision that we made 9 10 as an integrated subcommittee was that we wanted to -as a committee it was unanimous that we would like to include 11 12 in the entry criteria geographic representation. here as one of the examples of the heritage objective and 13 we thought that first you can't really assess the 14 15 contribution of a given site unless you are looking --16 and that it was important enough to be an entry criteria. Then the other things that we did in the 17 subcommittee was to go down the first two columns and talk 18 19 about the example of objectives and then the types of places 20 that exemplify that objective. I can read them if you 21 would like. We have the notes and we are going to share that. We are going to work a little more on that. 22 CHAIRMAN HIXON: You created a list but haven't 23 yet prioritized it? 24

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DR. CHATWIN: We have not prioritized.

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What

1	we did was basically define the universe of things that
2	we are going to prioritize and tomorrow we are going to
3	get to the
4	CHAIRMAN HIXON: Is it the same list that you
5	got as a strawman or is it different?
6	DR. CHATWIN: We added more examples.
7	CHAIRMAN HIXON: How about saying the ones that
8	have been added to that strawman?
9	DR. CHATWIN: Okay. I wasn't taking notes so
10	I think I've got it but basically we have neglecting important
11	geological and we added an oceanographic feature because
12	there was one that talked about oceanographic features.
13	We removed that so we lumped it. Then the next one was
14	unique or rare communities. We defined it as unique or
15	rare habitats and associated communities. Then
16	biodiversity hot spots. I think we changed spawning
17	aggregations if I'm not mistaken.
18	CHAIRMAN HIXON: So you are well on your way
19	to complete the list?
20	DR. CHATWIN: I think the list is complete.
21	CHAIRMAN HIXON: Oh, okay.
22	DR. CHATWIN: What we haven't done is
23	prioritized.
24	CHAIRMAN HIXON: Okay. Great. Thank you.
25	Quickly, Bob Bendick.

1	MR. BENDICK: Are you talking about anything
2	that are now marine eco regions well defined for the U.S.
3	about representation within eco regions or some other
4	biogeographic description?
5	DR. CHATWIN: We didn't talk about regions.
6	We had a discussion about what sort of regional
7	representation would we want to see. The center explained
8	what regions they are using. That seemed satisfactory
9	to the group. I would ask the center to explain which
10	regions they are using. Basically it was not unlike the
11	Fishery Management Council Region.
12	There was a discussion about regions. We haven't
13	got into whether we should use marine eco regions because
14	it seemed to satisfy the committee to use the regional
15	council.
16	CHAIRMAN HIXON: You look like Tony Bennett or
17	somebody right now but we'll let that go.
18	DR. CHATWIN: I'm not going to sing.
19	CHAIRMAN HIXON: Okay. C3. This is the
20	Priority Objectives for Sustainable Production.
21	MR. PETERSON: Yes. One of the things we had
22	a little trouble shifting to is the reason for cultural
23	areas, for example, is primarily a protection objective
24	to protect shipwrecks and to protect submerged prehistoric
25	sites and so on so the primary purpose of the cultural

and heritage areas to a major extent is protection.

Here the primary purpose of the sustainable production areas is sustainable use but we had a little trouble making that shift in our mind because we kept trying to be parallel in what we had done before. What we did then we went into using these examples. Let me go to the second page. Turn over to the second page.

CHAIRMAN HIXON: We don't have the handout.

MR. PETERSON: I'm sorry. Okay. On the first page we had reduced by-catch but obviously that's important for sustainable production, protecting spawning areas. We actually had a juvenile and mature fishing areas that are necessary for sustainable production.

We had nursery habitats to protect forage grounds. Then we had a major objective to conserve areas of high production, areas that are high productivity. If you're going to have sustained production, you want to be sure you protect the areas of real high production.

Then we got into conserving natural and extended age and sex structure of important harvestable species. In other words, unless you maintain the age structure, sex structure, and life cycle structure. But one of the examples listed in the handout was no take sites and we thought that's really maybe a zoning or management thing. It's not an example of a place that contributes necessarily

1 to sustainable production so we are probably going to 2 eliminate that. Then we had conserving or restoring. We took 3 4 out historic areas because we thought that got pretty much 5 into the cultural side of things so we had conserve or 6 restoring priority, high priority, fishing grounds, and 7 habitats. Species that provide support opportunities for recreational fishing for example. 8 We made this shift from the pure protection 9 10 side to sustainable production as its primary objective some level of use, supporting sustainable use. In fact, 11 12 we might have been happy with this one, or I would have been, if we had called it sustainable use. You are producing 13 14 for use. Anyway, we have a lot more work to do. We do 15 have this on the computer and we'll try to shape it up 16 over night and spend some more time on it. 17 Putting these together have both benefits and It took longer but we also got broader 18 detriments. 19 contribution which I thought was helpful. Any comments 20 by other people on the new subcommittee? Very active group. 21 I don't think there was a shrinking violet in the group. CHAIRMAN HIXON: Good, good. Okay. 22 Thanks, 23 Max. Right now it's 4:15 and it's the public comment 24 25 Has anyone signed up to make public comment?

period.

Zero. That's too bad.

Okay. So here is what I suggest we do. Rather than taking a break now, we are going to adjourn at 5:00. We have 45 minutes now of free-ranging open discussion to provide feedback to each of the subcommittees. There has been some excellent feedback so far.

The idea, I'm hoping, is that the chairs of each of those subcommittees takes very good notes and then when we meet tomorrow morning we start addressing these issues. Is that okay with everybody to do this for 45 minutes? First thing tomorrow we'll dive right back into our subcommittees and revise our products. Okay? Is everybody okay with that? Okay. Gil, you're first.

MR. RADONSKI: I would like to address Steve Murray's report which I think was excellent and the comment that Dan made. I think they were excellent as well. I think Steve's report and his committee's hard work really succinctly captures what the hell we've been doing. I think it really is good. I suggested to Steve, and I don't know if he likes it or not, but retain these categories we have but in the far right category where we have multiple use and no take eliminate those completely.

Not the verbiage, just the headings. Eliminate the words "multiple use" in each category and "no take."

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1 That leaves us with a conservation area having multiple 2 uses, etc., and a reserve no extractive uses. We can get 3 rid of the very controversial term no take. 4 CHAIRMAN HIXON: Okay. Very succinct. Ι 5 appreciate that, Gil. Very good comment. 6 Okay. Dan. 7 MR. BENTON: Gil, would you accept a friendly amendment? You used the word extraction and I think somebody 8 9 reminded us that it's possible to harm a precarious area 10 without taking something out but, indeed, by putting 11 something in. Would we want to change it from no extraction 12 to no discernible human induced impact? MR. RADONSKI: I think that's excellent. 13 14 may tinker with the verbiage in those boxes. I was just 15 reading it. 16 MR. BENTON: Good. 17 MR. RADONSKI: I didn't have any ownership on it. 18 19 MR. BENTON: I think the distinction is a good 20 one, Gil. Are we doing something bad either by taking 21 something out or putting something in and that's different from the other category. I submit. 22 23 CHAIRMAN HIXON: Okay. That's great. 24 thing I just wanted to add while we are on that particular 25 table.

1 MR. RADONSKI: Could Steve's committee comment 2 on that? 3 CHAIRMAN HIXON: Sure. Absolutely 4 DR. MURRAY: First, Gil's suggestions are always 5 eloquent and well received. I think we are open to any 6 ideas that you all might provide with regard to how we 7 handle that last column. Dennis handed to me again some additional language. Instead of no take, no extractive, 8 destructive, or disruptive activities. Dan, that is sort 9 10 of going where you were going. The other place where this could get solved 11 12 is you notice we've been very parallel in calling the category that is identified with multiple use we've called it an 13 area. In the category involved with no take we've called 14 15 it a reserve. 16 We might simply provide some definitions of 17 what an area is and what a reserve is in terms of this categorization and that would get rid of that last column. 18 19 It would be under the definitions of what those titles 20 are. Any other comments, please make them and we'll capture 21 this and battle it out tomorrow morning. CHAIRMAN HIXON: Just one note of clarification. 22 23 I notice that for one you call it a conservation area and for the others you just call it an area. 24 25 That's probably an oversight. DR. MURRAY:

1 Conservation probably should come out. 2 CHAIRMAN HIXON: Okay. Ellen is next, then Jim, 3 then Dan. Actually, so this isn't too broadly free-ranging 4 let's try to go from one topic to the next. Is there anything 5 -- are any of these questions specifically referring to 6 what Steve just said? MR. BENTON: Would you allow the substitution 7 of the word "park" for area? 8 MS. GOETHEL: No. 9 10 MR. BENTON: Okay. Withdraw it. 11 CHAIRMAN HIXON: Okay. That's out. Ellen, 12 does yours have to do with this? Okay, please. You're 13 next. MR. BECKER: I lost my train of thought completely. 14 15 I think that in looking at this I see this from the ground 16 up rather than from where we are sitting here. In order 17 for these to work you have to retain a little flexibility. If we get very, very specific in the uses, there could 18 19 come a time when we would like to allow some type of activity 20 that we can't even think of right now but it would be so 21 restrictive by saying no human uses that it would hinder the ability of that area to continue. 22 23 I'm not being really specific here but if I think about this a little bit, I'm sure I could come up 24 25 with something that everyone would agree should be allowed but if you change the wording, the way we have it now it says it's up to the governing body to be able to limit depending on site management goals so they would be able to say, "No, you can't take a boat through. You can't extract. You can't use a jet sky." But in some places traversing across or using something else would be acceptable to everyone. Do you see what I'm saying?

CHAIRMAN HIXON: Sure.

MS. GOETHEL: Good.

CHAIRMAN HIXON: So I have Jim and then Tony. Anyone else? Jim.

DR. RAY: Building in part on what Ellen said, I think multiple use is a good term because it's a term that people that are involved with it and concerned about protected areas already know, multiple use. On the no take something that is a little bit broader but the very same meaning would need to be restrictive use or limited use and then with the qualifiers underneath it.

Then you can define what that means by restricted use or limited use to cover the various extract, etc., etc., etc., that we've been talking about. That might be a more powerful way to do that. multiple use is something people already know. For people that are the skeptics, it's nice to know that you are talking about multiple use areas. Those are my two cents worth.

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1 CHAIRMAN HIXON: Nice explicit comment. Thank you. 2 3 Do you want to answer that, Steve? 4 DR. MURRAY: I just would ask for each of you 5 if you were to eliminate the bold words "multiple use" and "no take" how much problem do we have? 6 7 CHAIRMAN HIXON: Tony. DR. CHATWIN: I would just caution about adding 8 9 language that implies having to know some sort of very detailed threshold. Discernible human impact, that is 10 11 something to me opens a whole cadre of problems and it 12 brings into play the idea of burden of proof that has to 13 be met before a certain use gets restricted. I like the 14 idea of the simple -- the way that Gil suggested. 15 CHAIRMAN HIXON: Thank you, Tony. 16 Max. 17 MR. PETERSON: I was playing with such wording. Instead of no take put something like, "limited use such 18 19 as" and list some examples because I think Ellen was right, 20 there may be examples that would be permitted so if we 21 talk about "limited use such as" we could list research, 22 education. 23 We could list traversing the area. That could be a limited use. My thought would be to change that. 24 25 I would still leave the titles and I would leave the second

1 It would be "limited use" instead of "no take." 2 CHAIRMAN HIXON: Okay. Thank you, Max. All good points. 3 4 Dennis Heinemann. 5 DR. HEINEMANN: That was quick. These really could be combined. They both say, "Uses may be restricted 6 7 or zoned and access limited as necessary to meet site management goals." The one difference between the two 8 9 is that the no take actually prohibits, not just limits 10 one type of activity. That is the fundamental difference 11 here. 12 All of these activities in terms of their impacts exist on a continuum and at one end of the continuum is 13 14 zero where you completely prohibit it. I think in a sense all areas are multiple use. What distinguishes the no 15 16 take is that some activity there is actually not just 17 regulated or restricted but prohibited. The no take category could be one type of MPA in which some activities 18 19 are prohibited, not just limited. 20 CHAIRMAN HIXON: Thank you. 21 Bob Zales. VICE CHAIR ZALES: I kind of like Steve's idea. 22 23 You take off the multiple use and no take. On the no take one after uses where it says, "No extractive uses" 24

put "No extractive uses or dumping allowed."

1 I think that takes care of Dan's point. Still 2 you have -- I mean, that would still in my mind allow 3 restrictive uses such as if you've got an area so big that 4 you got to allow some kind of transverse by vessel or whatever 5 to keep it from going way out. You've got a safety issue 6 there in some cases so you could still allow that but as 7 they're going through they can't take anything out and can't put anything in. Maybe you want to consider that. 8 CHAIRMAN HIXON: As long as dumping includes 9 10 huge anchors being dragged along the bottom. Jim. 11 12 DR. RAY: Just a comment. In multiple use areas right now you have prohibitions. There's things you can 13 14 do and things you can't do. You have prohibitions in 15 multiple use areas. 16 CHAIRMAN HIXON: I think what's on the table 17 here is the idea there is a full range of restrictions from basically very few to a huge number and uses, uses 18 19 and restrictions. Then at one end of the spectrum is total 20 restriction and virtually no uses or very few uses. 21 the dichotomy I'm hearing from everybody. 22 DR. MURRAY: I just want to say, as Dennis pointed 23 out, there really is a continuum of impacts that would be allowed to progress in any of these MPA areas but it 24

does, I believe, do us well to identify these very strongly

protected areas for Marine Natural Heritage, for Marine Sustainable Production, and for Marine Cultural Heritage.

Hence, coming up with a category that designates that I think is a good move.

For example, it's going to be very difficult, and if the MPA Center would like to tackle this it would be interesting and challenging, I think, to take all of the areas out there and develop some categorization scheme that is, in fact, based on the degree of protection provided at each site.

You would have one difficult time doing that because you are going to have to make that judgment based upon for any location the protective goals for that site.

There is this one category that is worth, I think, designated.

Any analysis would also identify this type of strongly protected area. You see that in all kinds of reports.

There are so many square nautical miles of Marine Protected Areas and there are so many square nautical miles of highly protected no take areas because it does give an indication of the amount of ocean that is spatially protected at the highest level that we have. That highest level would also be represented in this management system. My own thought on this is if you get rid of the bold words they are not needed. You simply have some way to describe the use. That column could be titled simply "use."

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1 CHAIRMAN HIXON: Okay. I have Dan Bromley, 2 Charlie Wahle and Dave Benton. I wonder to what extent we are 3 MR. BENTON: 4 imprisoned by the square boxes and would it be possible, 5 Steve, and colleagues if over on the far left we had Marine 6 Natural Heritage Area and then instead of boxes we had 7 a continuum in which there -- I mean, look, they both have the primary conservation focus being natural heritage so, 8 in one sense, that column is redundant. 9 Why do we need that column? We have on the left 10 11 Marine Natural Heritage Area and then we have a continuum. 12 Jim and others are right. I mean, you go along this continuum and there is a whole set of descriptions at the 13 14 far end of this continuum is the most extreme level of 15 control and prohibition. Those things out at that far 16 end get called a resource reserve and everything else back 17 along the continuum is called a resource conservation area. Do we help ourselves by getting rid of the boxes? 18 19 CHAIRMAN HIXON: Charlie Wahle. You have to 20 use a mic, Charlie. 21 DR. WAHLE: I just wanted to add a couple of 22 things for perspective on this. This is a very interesting 23 discussion and one that pieces of we've had for a long

time. The challenge, you know, is making sense out of what is really a pretty complicated picture.

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24

The way we went about it with that classification system, as you all have seen, is break it down into all these different bits and use those bits to do analyses like what's in those posters there which have, for example, six levels of protection ranging from you can do pretty much anything to you can't take things to you can't take or impact and you can't go there.

We've done all that and what we are now trying to do is roll that back up into useful categories. The tension we've experienced, and sounds like you all are, too, is slipping back down and splitting it up again or rolling it so high up into concepts that don't really tell you very much.

I think what your committee came up with here is in our experience it's just about the right level between big bins and a whole bunch of little tiny ones. A lot of what you all are talking about and calling for we have literally right up there. It's just a matter of turning it into something that makes sense to us and to the average person.

CHAIRMAN HIXON: So for clarity, Charlie, can you give us a rundown of how these particular categories would be used by the MPA Center. Is it just for public education? Is it for --

DR. WAHLE: I don't know. This is --

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1	CHAIRMAN HIXON: I mean, what are you going to
2	use these things for?
3	DR. WAHLE: We have used them, essentially these
4	three outer bins. Natural Heritage, Sustainable
5	Production, Cultural Heritage are the fundamental
6	organizing principles for all of our work. Those are the
7	goals of the framework, etc., etc.
8	Those and the levels of protection and a bunch
9	of other variables that we haven't really dealt with here
10	are the way in which we analyze the 1,600 or so MMAs that
11	exist to come up with exactly that type that Steve was
12	talking about, what's really out there and what do they
13	claim they're doing.
14	Now what we're trying to do with this exercise
15	simplify that a bit and turn it into something that is
16	more akin to, "Well, it's a national park and I know what
17	that means." Instead of, "I have six variables with seven
18	layers within each one and I don't know what that means.
19	CHAIRMAN HIXON: This is more for public
20	outreach.
21	DR. WAHLE: Yeah. It's an organizing piece.
22	CHAIRMAN HIXON: Education at all levels.
23	DR. WAHLE: Right. And a way to divide up the
24	ultimate national system so that people can understand
25	what it's about. The challenge is you go down that road

of, "Can I dump or can I pee off the side of the boat or can I do this and that?" Or do you roll it up into, "I just shouldn't go there and do anything bad."

CHAIRMAN HIXON: Peeing off the side of the boat is usually considered -- I won't get into that. Thanks, Charlie.

Ellen. No, Dave Benton is next.

MR. BENTON: Thanks, Mark. I think Charlie partially answered what I was going to ask and that is is this the kind of thing that the center wants or is this too much detail or not enough detail because it was something that we were struggling with in our discussions. You could hear it around this table. You can either get very detailed and list out all kinds of things or you can be very generalistic. I was sort of curious about that and I wanted to see what Joe's reaction is. Maybe Charlie answered that question. I'm not sure but maybe Joe has something to add.

MR. URAVITCH: Yeah, I concur with Charlie. I mean, what we've discovered in working with the more detailed classification system that Charlie primarily, but others as well, have been developing over the years is an analytical tool to really understand what's going on out there. It gets so complicated that you can't really talk to your mother and say, "This is what we got."

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1	This is really the effort to deal, I think,
2	more with the general public and decision makers and to
3	communicate a fairly clear simple message without getting
4	to the level of details except for those people who really
5	want to do that.
6	MR. BENTON: Just a quick follow-up, Mr Mark.
7	CHAIRMAN HIXON: Sure.
8	MR. BENTON: I almost said Mr. Chairman. I was
9	going to fall into that trap.
10	Joe, if that's the case is this I mean, I
11	was somewhat looking at this also as a way that an entity
12	might use to nominate a site to the system. It falls within
13	this category in this way and here are other management
14	goals or whatever sort of fit within that. Is that how
15	you guys are seeing this? Are you seeing it that way,
16	too, that this was how a nomination would occur?
17	MR. URAVITCH: Yes.
18	CHAIRMANHIXON: Okay. I'vegot Ellen, Charlie,
19	Gil, and Steve.
20	MS. GOETHEL: Okay. I just have three points.
21	I think we need to keep in mind that we need to sell this
22	to the public. If it becomes too restrictive or if we
23	use catch words that have a negative connotation, it's
24	going to blow up in our faces and they won't accept it.

You need it to be simple, easy to understand.

I was going to say it needs to be able to be used by the governing body for nomination purposes so that they can see where they fit into the national system if they feel they really do. They need something very easy and specific enough so they have good guidelines.

The last point I had was if we become too detailed or too general we will open ourselves up to lawsuits on either end so you have to be very careful about the wording

or too general we will open ourselves up to lawsuits on either end so you have to be very careful about the wording so you don't go off in either direction. It has to be fairly exact but leave enough flexibility so that the governing bodies and the Marine Protected, anyone working on it has some ability to change.

CHAIRMAN HIXON: That's definitely the tradeoff.

Charlie Beeker.

MR. BECKER: I want to go back just for a second where Dan came from in the confusion factor. I think maybe you had a good point about working outside the box. I've worked in Florida and made underwater preserves on shipwreck sites and then I go to California and make underwater parks on shipwreck sites.

I go to the Dominican Republic and they don't want to use parks because they are national parks or preserves so we are making underwater museums in that country but they are all the same function. I kind of like the idea

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2 have reserve status, that makes sense to me. 3 When you put out the word "park" there is a 4 problem but I understand preserve but I'm not sure I 5 understand area, if it's an area. Unless we have a Marine 6 Protected Area with reserve status, then I can understand 7 that which is what, Ellen, you're also saying. We may need to just think about that a little bit because I know 8 park and preserve is a big problem for us because what's 9 10 area then. CHAIRMAN HIXON: I think Steve indicated that 11 12 the word conservation got left out inadvertently. Is that correct, Steve? 13 DR. MURRAY: Actually, you know, we were trying 14 to make this a little shorter. Marine Natural Resource 15 16 Area, not Marine Natural Resource Conservation Area because 17 you get four modifiers on this poor area. CHAIRMAN HIXON: Okay. I just wanted clarity 18 19 on that. Okay. Thanks, Charlie. Gil. 20 21 MR. RADONSKI: I would just like to second what Joe Uravitch said. When I made a comment on this paper 22 I think it succinctly grabs what we've been trying to do 23 and it's an excellent way of conveying to the public where 24 25 we are going with this.

that if you have a Marine Protected Area and some of them

A week ago I was on a talk radio show in Eastern North Carolina and the subject was MPAs. The level of perception by the public is horrible. What I found out there is it's out of line but if we ever needed outreach we need it badly because the public has no idea what the hell we're talking about.

CHAIRMAN HIXON: I was on a similar program last Sunday in Oregon and I couldn't agree more. There's the full breadth of the country.

Steve Murray.

DR. MURRAY: The comment was made about how many categories should we be striving for in order to communicate something meaningful to the public and the user groups.

I think if you go back to our original report of May whenever that we finalized up in Portland, Maine, we have three.

Now this particular effort gives us six. All right.

How many more could you have? You could have a whole lot more. I would suggest that for an individual site there may well be a matrix of different kinds of uses that would evolve and be allowed or permitted or used as part of the overall management plan for that site. If you are going to try to convey something to the public, it needs to be simple. It seems to me that it's three or six. It's three or something similar to what we have come up with here.

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I think, and I'll say it again, that having this reserve type of highly protected strongly protected area is worth communicating. I think we are not communicating anything by title in terms of how much protection is offered by the multiple use areas. You have to know more in order to know what type of protection really occurs there.

In California the thought was that, yeah, you would be able to put a label on each area and that would really mean something to any user. Okay. So if you have an area that's called a marine park in California's terminology, that does mean something. It means there's only recreational activity here. But if you are a recreational user, you are going to have to look up and see what kind of recreational activity is really allowed.

You put the level, Marine Conservation Area, on an MPA and you're not conveying much of anything other than there's some kind of commercial activity. But in terms of any other public user, the user has no idea what that area means so this is a case where that label is virtually meaningless to anybody in the public. A commercial person is already regulated. They've got some way to figure out what they're doing or not doing.

Now, State Marine Reserve is a very clear label

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1	for everybody out there. It very clearly tells everybody
2	this is an area within which there is no commercial
3	recreational extraction that's in the California system.
4	That label does a very good job of conveying what goes
5	on inside that area.
6	I don't think you can come up with a simple
7	scheme that is going to allow you to differentiate among
8	all these other multiple uses and what they may or may
9	not need. I think that a six-level scheme is a good one
10	for communication. The words may need to be different
11	but I think the six works.
12	CHAIRMAN HIXON: I think Subcommittee A has
13	gotten plenty of feedback now and people are starting to
14	repeat themselves so you guys have plenty to work with.
15	I would like to spend the last 15 minutes going onto some
16	of the other subcommittees so if people have issues with
17	any of these other patterns, let's go. Tony is ready and
18	then Bob. Mic, please.
19	DR. CHATWIN: Thank you. I would like to
20	CHAIRMAN HIXON: What subcommittee?
21	DR. CHATWIN: I would like to make a comment
22	on Subcommittee B again.
23	CHAIRMAN HIXON: Okay.
24	DR. CHATWIN: I have made comments before and
25	I know they were heard but I would encourage the proponents

П	
	of a three-tier system to bring some examples of systems
	that are tiered elsewhere in the country or in the world
	that could help us understand what the benefits are of
	these multiple tiers. I am sitting here and I am really
	trying to think why should we have three tiers, especially
	with comments that I heard that some sites may never get
	to tier 1. I'm thinking of my bias here are
	the incentive work we are going to develop and if we are
	creating a hierarchy where progression is not going to
	be possible for some of the sites, we are undermining
	potential incentives for participation. I also think
	well, I think it would be very helpful if some examples
	could be brought to light by that subcommittee.
	MR. BENDICK: To that point, there was a
	discussion in doing this how many sites would qualify.

MR. BENDICK: To that point, there was a discussion in doing this how many sites would qualify. They figure around 200 or 300 or whatever. We asked Joe and I guess Joe was going to create some work for Charlie or somebody if they could come up with some kind of ballpark figure tomorrow in this kind of situation about how many, 5,000, 1,500.

PARTICIPANT: We're doing it right now.

MR. BENDICK: So they are obviously working on it. Hopefully we'll have an answer. Clearly this could be too restrictive and the issue about possibly not being able to get to some point because of the way it's designed

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1	and the purpose. I don't know that any of those exist.
2	They may or they may not. I don't know because everybody
3	with MPAs is different.
4	You've got regional fishing restrictions.
5	You've got a variety of things here. In some of those
6	cases to provide a function that may be considered the
7	ultimate goal of an MPA, that is how some of that might
8	happen. Hopefully we'll have this information tomorrow
9	to discuss further.
10	DR. CHATWIN: I'm interested in separating an
11	initial the issue about starting small and growing from
12	the issue of incentives. I think they may be mixed up.
13	The idea of creating this tier will create incentives
14	to progress up the tier ladder which I would like to know
15	it's an assumption that I would like to know if it has
16	been tested.
17	CHAIRMAN HIXON: That assumption was definitely
18	discussed.
19	Rikki, did you want to insert your findings
20	here? In other words, of the 1,600 MMAs how many would
21	meet those four? Is that what you can give us right now
22	or not?
23	MS. GROBBER-DUNSMORE: No.
24	CHAIRMAN HIXON: We'll do that later. Okay.
25	Bob Bendick.

MR. BENDICK: Two things. I don't know whether it's on target but there is a program called a conservation services program of the Farm Bill that ranks the performance of farms. It's a fairly small program compared to the others but it ranks the performance of farms environmentally and the farmers who are doing better, it has three tiers, get more money. You might take a quick look at that.

Secondly, on the issue of regions, you know, this is an area that the Nature Conservancy has a lot of concern about because our focus is not just on hot spots of biodiversity but representation of all the kinds of habitats. At a time when NOAA and others are spending a lot of time on ecosystem management, for example, in the southeast U.S. Atlantic Coast there's a big academic and NOAA program on ecosystem management of that region.

I think it probably deserves a little more attention. It may end up that the fishery management zones are the things that make sense but it may not. I think if we are creating a representative system a number of Marine Protected Areas that represent the diversity of kinds of habitats across the country really need some attention in thinking about entry into this system and incentives, stuff like that. I'm not sure we've done that yet.

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Τ	CHAIRMAN HIXON: Thanks, Bob.
2	You want to insert something, Joe?
3	MR. URAVITCH: I just want to say I think there
4	is some misunderstanding in terms of the regions thing.
5	That is just how we're working in terms of political regions.
6	That doesn't mean that we're not going to use things like
7	large marine ecosystems and various habitat classifications
8	etc., when we look at representativeness but we have to
9	structure ourselves in some logical way to work with
10	governmental institutions.
11	Regions mean a couple different things. It's
12	not a defined term here. There is sort of the administrative
13	regions which are working but then you are looking for
14	scientifically based regions as well in terms of the
15	resources.
16	MR.BENDICK: Ellenjustremindedmethatanumber
17	of the councils are working on various habitat mapping
18	approaches so maybe there's more material there to help
19	us out.
20	CHAIRMAN HIXON: Thank you.
21	I have Lauren, then Max Peterson, then John
22	Halsey.
23	MS. WENZEL: I just wanted to share that we had
24	someone from the Corals Program, Dana Wusinich-Mendez,
25	sitting with us. They have done some more detailed analysis

1	based on the MMA inventory for the seven states and
2	territories with Corals. They found that on the order
3	of about 10 percent of the 220 sites that they surveyed
4	would meet these four checkmarks. That will give you some
5	idea how restrictive, at least for Corals, they found that
6	these would be. It bears up your point.
7	CHAIRMAN HIXON: That wasn't an actual analysis.
8	That was her guesstimate at the time.
9	MS. WENZEL: But what is not an estimate is that
10	only 20 percent had management plans so she was going from
11	the number that would meet all four.
12	CHAIRMAN HIXON: Thanks.
13	Max.
14	MR. PETERSON: A few years ago Harvard University
15	had their people looking at admissions and they got all
16	through and said, "Are you happy with your admissions?"
17	They said, "Yeah, we are very happy." The dean said,
18	"I would just like for you to know that you unanimously
19	rejected Winston Churchill," because he didn't meet one
20	of their in/out factors.
21	In/out factors are tricky in that you may not
22	get geographical distribution. You may not get a good
23	mix of natural and heritage areas and so on. If you had
24	scientists look at it, they would say, "If we were selecting

sites, you've got a whole bunch of dogs and there's a whole

1	bunch of them better than that. They just happened to
2	meet this criteria so they're in."
3	I would encourage you to use these semis, maybe
4	some weighting things or something but don't use strictly
5	in and out factors and put some things like as Tony mentioned
6	geographic representation of habitats and ecosystems,
7	geographic in terms of regions of the country because you've
8	got to have public support for this when you all get through
9	it. You don't want to end up with one system that's all
LO	on the Gulf of Mexico. Okay.
L1	CHAIRMAN HIXON: Thank you, Max.
L2	John Halsey.
L3	DR. HALSEY: Yes. I would like to emphasize
L4	what Terry said about the probable inability for most states
L5	to participate in this given that in many cases I'm not
L6	sure what the definition of appropriate staff support would
L7	be but I think it's got to be at least one person full
L8	time devoted to this. I know in Michigan there is no such
L9	critter. Site specific management plans may also be
20	problematic. I think you can write off virtually all of
21	the Great Lake states as ever being able to enter the system.
22	CHAIRMAN HIXON: Thank you.
23	Ellen.
24	MS. GOETHEL: I just was thinking about that,
25	what John just said. As an alternative if there is an

area, a state area that doesn't have a board or full-time support, I would think they could put together a voluntary board to govern it which would not be -- I know lots of different areas that I work in use voluntary boards as their governing body.

I think that maybe we need to -- if we think there are areas that will not meet the main criteria, give them suggestions or have someone helping them to meet those, or at least be moving in the direction of meeting those criteria. I think we can include some of the state and even the tribal areas if we did that.

CHAIRMAN HIXON: This sounds like combining your comments, John's comments, and Max's comments. It might be something like on a case-by-case basis having a body that reads the case and comes to a decision as a possibility.

Bob.

VICE CHAIR ZALES: That may be. In looking at this because my concern is, too, that these things can be too restrictive. As I stated before, I suspect, and I don't have any way of knowing, but I suspect a good many of those 1,500 entities of MPAs of various types are not even going to want to be considered.

They are not going to opt out of this thing.

That in itself, and I don't know that we have any way

of determining that number, but that in itself in my mind

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1	is going to dramatically reduce the 1,500 and some lower
2	number. Some kind of review board or something that you
3	just suggested may be an option. I think we definitely
4	need to go back and play with this some and see.
5	CHAIRMAN HIXON: Thank, Bob.
6	Rikki. You have to use the mic. Sorry.
7	MS.GROBBER-DUNSMORE: Twenty-fourpercent have
8	a management plan with the data that we have available.
9	CHAIRMAN HIXON: Okay. So 24 percent have a
10	management plan.
11	Okay. Tony.
12	DR. CHATWIN: If I may, just for clarification,
13	that doesn't necessarily mean they have appropriate staff
14	support.
15	CHAIRMAN HIXON: Just that one criterion?
16	DR. CHATWIN: One criterion. That was just
17	clarification.
18	CHAIRMAN HIXON: Okay. It's nearly 5:00. Does
19	anyone else have something they want to say?
20	Charlie Wahle.
21	DR. WAHLE: Was there any consideration of using
22	the level of protection as a criteria because that is
23	something that we quantified. It's getting a little closer
24	to the cause and effect issue. That's what we're seeking.
25	All these other things are kind of precursors to that.

1	CHAIRMAN HIXON: I don't believe we did. There
2	was no discussion of that.
3	DR. WAHLE: We could give you a number at some
4	point about what that would look like.
5	CHAIRMAN HIXON: Okay. Sounds good. Others?
6	Tony.
7	DR. CHATWIN: Mr. Chairman, Mark, Mr. Mark.
8	CHAIRMAN HIXON: That's a little better.
9	DR. CHATWIN: Sorry. I just want to put this
10	out there. I am obviously concerned with the discussions
11	that are going on in Subcommittee B in part because those
12	are discussions that we've been having for a good year
13	in the Standing Subcommittee on Incentives and
14	Implementation. What we have here is not new. We have
15	had that discussion.
16	We did not come to consensus on this particular
17	proposal within that subcommittee and it now has resurfaced,
18	which is fine. I think it merits a lot more debate than
19	just in one subcommittee. I am getting concerned that
20	first we are discussing this in the absence of a discussion
21	about incentives because they are clearly tied together.
22	
23	The Farm Bill example I don't know it but it
24	is clearly we are discussing here what do we define
25	as a farm or equivalent and then tiering those farms from

the get-go without having incentives. The Farm Bill is different. You have farms and the farms, depending on how they fit in the tiers, will get a reward.

So the concern I have is that we are going to try to rush this one through and send our comments then to NOAA and Interior without having that discussion about incentives. I would like to propose that depending on how this discussion goes I might be making a motion not to send it.

CHAIRMAN HIXON: Your point is well taken. One possibility would be a very clear caveat that due to the time constraints there are important issues that could not be incorporated. Somehow implementing management/selection criteria without incentives would be folly. That's another possibility as opposed to just dumping the whole thing. The constraint we have is that by the end of this meeting we either have some input on the final framework or we don't have input on the final framework. It's really that constraint that we are facing.

DR. BROMLEY: If I may, if we are going to have a discussion about incentives, then I would ask that we have a discussion about incentives in the broadest sense and not just in terms of is there going to be more money because part of the rationale, part of the idea behind

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Dan.

this was creating the tiers in itself creates a set of incentives on MPAs to try to bootstrap themselves up into a higher category. I'm happy to have a discussion about incentives as long as we understand that the term incentives means more than just new federal money.

CHAIRMAN HIXON: Okay.

DR. CHATWIN: The Incentives and Implementation Subcommittee has been discussing all sorts of incentives and I don't think we can have a discussion about appropriate incentives. I fail to see with this structure how this in itself is an incentive. I think that is an assumption and that's why I asked for some examples of how that would work. I think that a tier and progressing up the tier implies that there is a reward for doing so. What I've heard is that some sites might not be able to even progress. All they can aspire to is being a tier 3.

CHAIRMAN HIXON: Okay. The issues are on the table. It's actually after 5:00 but I want to finish up people who want to talk.

Bob, you're next.

VICE CHAIR ZALES: I agree with you Tony. From the very get-go with this whole committee the whole concept of a national system the question has been what do you get. Nobody has been able to answer that yet. It's still in my mind where we're headed with that. If we're going

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1	to discuss it, then fine. I don't know how you
2	can talk about joining something just because you want
3	to be a member of some elite club that you don't know what
4	you're going to get for being a member. Okay, I'm a member
5	of a club and that's it. Until that is pretty well sorted
6	out, I think we are putting the cart before the horse.
7	I don't know how you can continue that way.
8	CHAIRMAN HIXON: One of the constraints is, as
9	you say, Tony, we do have a subcommittee, a standing
10	subcommittee, working on incentives so we didn't want to
11	just completely ignore that. We sort of said, "Okay, well,
12	there's this other piece that the MPA Center needs and
13	we'll have to get the Incentive Committee's report out
14	in October. Unfortunately not right now."
15	Rikki, did you have more information for us
16	or something?
17	MS. GROBBER-DUNSMORE: I do.
18	CHAIRMAN HIXON: Yes.
19	MS. GROBBER-DUNSMORE: This is just to give you
20	an idea of this is the number of MMAs by use and we have
21	82 percent of the sites are uniform multiple use, 6.3 percent
22	of the sites are zoned multiple use, 1.7 percent of the
23	sites are zoned no take, 4 percent are no take, 2 percent
24	are no access, and less than 2 percent are no impact.

Those numbers for uniform multiple use they get larger

1	for the multiple use if you do it by area. The numbers
2	I just gave you are for numbers of individual MMAs.
3	DR. BROMLEY: Did you give us two percentages
4	for no take, Rikki? Could you give them to us again?
5	You had 1.6 and then you had 4 percent, I think.
6	MS.GROBBER-DUNSMORE: We have zone no take which
7	is 1.7 percent and then no take was 4 percent.
8	DR. BROMLEY: Ah, zoned versus not zoned.
9	MS. GROBBER-DUNSMORE: Correct.
10	DR. BROMLEY: Thank you.
11	CHAIRMAN HIXON: What areas?
12	MS. GROBBER-DUNSMORE: Zoned multiple use is
13	6.3 percent of the sites.
14	CHAIRMAN HIXON: Rikki, would you mind tomorrow
15	morning having all that stuff up here on the chart?
16	MS. GROBBER-DUNSMORE: Sure. I can have it by
17	number and by area. Like you say, if you look at over
18	there on the national, that gives you the area 99.98 percent
19	of the area in MMAs is multiple use.
20	CHAIRMAN HIXON: Okay. A summary table would
21	be great tomorrow. Thanks so much for doing that.
22	Okay. I'm going to let Wally speak and then
23	I'm going to wrap this up for the day.
24	Wally.
25	MR. PEREYA: Tony was asking for an example.

At the time the Magnuson Act was passed in 1976 in the North Pacific 98 percent of the ground fish resources were caught and processed by foreign entities. Shortly after the Magnuson Act was passed one of the first amendments to it established a three-tiered allocation system where the highest priority went to U.S. caught, U.S. processed fish.

The lowest priority went to foreign processed. The intermediate was U.S. caught foreign processed. Within a period of about, I would say, 10 or 12 years the entire ground fish resource went from essentially foreign caught, foreign processed to the highest priority which was U.S. caught, U.S. processed. That was strictly based upon a tired allocation as an example.

CHAIRMAN HIXON: That's great. Thanks, Wally.

Okay. A couple things. First, I am very grateful for how everyone dove in and stayed focused today. These are not easy tasks you have been assigned. Instead of balking everyone just said, "Okay, let's get done what we can." Thank so much for that. I'll give Lauren a chance for any other announcements.

The second thing is there's an effort not just by us but by other groups to enhance funding for the MPA Center. This is not something obviously the MPA Center can be involved with legally but I have scheduled a break

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2	do what they can while they are here in Washington to make
3	a difference. That is simply an opportunity that I lay
4	out.
5	Relevant to that the Marine Conservation Biology
6	Institute has sent a letter to Congress appropriations.
7	I have not been involved in this. This is something that
8	I just found in a pile today that was handed to me. A
9	copy of that letter is out on the table. I encourage you
10	all to look at it mostly because the last page has a list
11	of key members of the house who would be important to contact
12	so I encourage everyone to take a copy of that document
13	and think about what they can do tomorrow.
14	Do you have any other announcements, Lauren?
15	MS. WENZEL: No.
16	CHAIRMAN HIXON: Okay. Dinner is at I'll
17	give you a second, Terry. Dinner is at 6:30, is it? 6:15
18	at Rock Bottom Brewery which is located where exactly?
19	MS. WENZEL: Ballston Mall.
20	CHAIRMAN HIXON: The Ballston Mall which is
21	across the street from this building on the first floor.
22	Terry.
23	MR. O'HALLORAN: For those of us that are going
24	to the Hill tomorrow, of which I am one, I've got some
25	appointments there, what line do I take on the Metro?

for tomorrow at 2:00 to give members the opportunity to

1	Could I get some direction where?
2	PARTICIPANT: The orange line.
3	MR. O'HALLORAN: Just get on the orange line?
4	PARTICIPANT: Get on the orange line
5	towards
6	PARTICIPANT: We can pull some directions.
7	MR. O'HALLORAN: Just tell me when to get off
8	and where to meet.
9	PARTICIPANT: We'll get that ready for tomorrow.
10	CHAIRMAN HIXON: Before we adjourn tomorrow at
11	2:00.
12	PARTICIPANT: You get off at Richmond.
13	CHAIRMAN HIXON: Yeah. It's not like H1. Any
14	other questions before we adjourn for the day? All right.
15	Come back here tomorrow. 8:00. Thank you everyone.
16	(Whereupon, at 5:07 p.m. the meeting was
17	adjourned.)
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